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COUNTY BOROUGH OF BOOTLE.



ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH
FOR
1936.

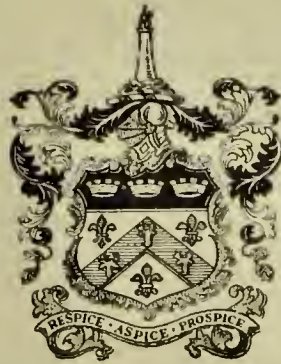
F. T. H. WOOD, O.B.E., M.D. (Lond.), B.S., B.Sc., D.P.H.

**Medical Officer of Health, School Medical Officer, Medical
Officer to the Public Assistance Committee, etc.**

BOOTLE :
BOOTLE TIMES, LTD., 30, ORIEL ROAD.

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BOOTLE TOWN COUNCIL, 1935-1936.

†*HIS WORSHIP THE MAYOR (MR. ALDERMAN CLARK, J.P.).	
*Mr. ALDERMAN BOOTH, J.P.	Mr. COUNCILLOR HACKETT.
Mr. ALDERMAN CULLEN.	§*COUNCILLOR DR. HARRIS.
Mr. ALDERMAN GARDNER, J.P.	Mr. COUNCILLOR HARRISON.
Mr. ALDERMAN HARRIS, J.P.	†Mr. COUNCILLOR HOLDEN.
Mr. ALDERMAN HAWORTH, J.P.	Mr. COUNCILLOR HUGHES.
†*Mr. ALDERMAN HUGHES.	Mr. COUNCILLOR JONES, J.P..
*Mr. ALDERMAN KEENAN.	Mr. COUNCILLOR D. KELLY.
†§*Mr. ALDERMAN KINLEY.	Mr. COUNCILLOR J. S. KELLY.
†Mr. ALDERMAN MAHON, J.P.	Mr. COUNCILLOR McLAREN.
Mr. ALDERMAN PATRICK, J.P.	Mr. COUNCILLOR McMULLEN
Mr. ALDERMAN SMITH, J.P.	Mr. COUNCILLOR McNEILL.
Mr. COUNCILLOR ABBOTT.	Mr. COUNCILLOR MAGUIRE, J.P.
Mr. COUNCILLOR ANDERSON.	†*Mr. COUNCILLOR MAHON.
Mr. COUNCILLOR ATHERTON.	Mr. COUNCILLOR MARSH.
Mr. COUNCILLOR D. B. BLACK.	Mr. COUNCILLOR MONKS.
Mr. COUNCILLOR R. A. BLACK.	Mr. COUNCILLOR OLSWANG.
Mr. COUNCILLOR BURNIE.	Mr. COUNCILLOR O'NEILL.
Mr. COUNCILLOR CAIN.	†Mr. COUNCILLOR RAINFORD.
Mr. COUNCILLOR CAMPBELL.	Mr. COUNCILLOR RILEY.
†Mr. COUNCILLOR CLEARY.	Mr. COUNCILLOR ROGERS.
†*Mr. COUNCILLOR CONNOLLY.	§*MRS. COUNCILLOR SMITH, J.P.
†§*Mr. COUNCILLOR CULLEN.	Mr. COUNCILLOR SPENCE.
Mr. COUNCILLOR DUNN.	Mr. COUNCILLOR WEBSTER.
Mr. COUNCILLOR WILLIAMS.	

* Member of Health Committee.

§ Member of Maternity and Child Welfare Sub-Committee.

† Member of Housing and Town Planning Committee.

HEALTH COMMITTEE.

Chairman—COUNCILLOR DR. HARRIS.

Deputy Chairman—MR. ALDERMAN KINLEY.

MATERNITY AND CHILD WELFARE SUB-COMMITTEE.

Chairman—MRS. COUNCILLOR SMITH.

Deputy-Chairman—COUNCILLOR DR. HARRIS.

This Committee consisted of members of the Health Committee (as indicated), together with co-opted members as follows:—

MRS. WEIR; MRS. GRANT.

HOUSING AND TOWN PLANNING COMMITTEE.

Chairman—MR. ALDERMAN MAHON.

Deputy-Chairman—MR. COUNCILLOR CLEARY.

STAFF OF THE PUBLIC HEALTH DEPARTMENT.

Medical Officer of Health, Administrative Tuberculosis Officer, and Medical Superintendent of the Corporation Hospitals—

F. T. H. WOOD, O.B.E., M.D., B.S., B.Sc. (Lond.), D.P.H. (Durh.).

Tuberculosis Officer and Deputy Medical Officer of Health—

R. HANNAH, M.C., M.B., Ch.B. (Edin.), D.P.H.

Assistant School Medical Officers and Assistant Medical Officers of Health—

Miss M. B. CLARKE, M.B., Ch.B., D.P.H. (Liverpool).

G. P. McCLOSKEY, M.B., B.Ch., B.A.O. (Belf.), D.P.H.

School Dental Surgeons—

H. B. DAWES, L.D.S.

E. G. O'SHEA, B.D.S.

Corporation Hospital, Linacre Lane.

*Matron—*Miss S. L. BEVAN.

Maghull Sanatorium.

*Matron—*Miss E. HOLDEN, R.R.C.

Maternity Home.

*Matron—*Miss M. W. CLEARY.

Chief Sanitary Inspector, Inspector under the Food and Drugs Acts; and the Housing Acts, etc.—

¹W. ROBSON.

Sanitary Inspectors—

¹²B. J. HOLDEN.

¹²W. E. LEATHER.

¹²³A. D. H. JOHNSTONE.

Clerical Staff—

H. A. BROWN, O.B.E. Miss WILSON. Miss THOMPSON. L. H. DEARNE. Miss MAXWELL.

Miss BROWN. Miss BEATTIE. Miss GREEN. Miss SMITH. Miss W. MULHALL.

Miss GEORGE. E. A. PRESTON.

*Chief Clerk and Vaccination Officer—*N. LOCKWOOD.

Health Visitors—

⁴⁵⁶Mrs. MEREDITH.

⁴⁵⁶Miss F. M. HUGHES.

⁴⁵⁸Miss STARK.

¹⁴⁵⁸Miss SKINNER.

⁴⁵⁸Miss WILD.

⁴⁵⁸Miss LYNCH.

⁴⁵⁸Miss ROBERTS.

School Nurses—

⁸Miss A. HUGHES.

⁸Miss THOMAS

⁸Miss DAVIES.

⁸Miss C. HUGHES

(Orthopaedics).

*Tuberculosis Nurse—*⁸Miss KELLY.

Part-time Officers.

Medical Officer, Ante-Natal Clinic

P. MALPAS, F.R.C.S.

Medical Officer, Maghull Sanatorium

A. HENDRY, M.D.

Medical Officers, Venereal Diseases Clinic .

{ W. L. WEBB, M.B., Ch.B.

{ Miss R. NICHOLSON, M.B., D.P.H.

Ophthalmic Surgeon

E. ALLAN, M.B., Ch.B.

Throat Surgeon

C. YORKE, F.R.C.S.

Orthopaedic Surgeon

B. L. MCFARLAND, M.D.

Medical Officer, Aural Clinic

I. A. TOMARKIN, M.B., Ch.B., F.R.C.S.

Public Vaccinators

{ A. W. HANLON, M.R.C.S., L.R.C.P.

{ A. V. GLENDENNING, M.B., Ch.B., D.P.H.

Pathologist

Professor H. D. WRIGHT.

Analyst

Professor W. H. ROBERTS.

Veterinary Surgeon

HENRY SUMNER, M.R.C.V.S.

Rat Officer

W. BORROWS

¹Certified Sanitary Inspector.

²Certified Inspector of Foods.

³Certified Smoke Inspector.

⁴Certified Health Visitor.

⁵Certified Midwife.

⁶Half-time Tuberculosis Visitor

⁷Assistant Inspector of Midwives.

⁸Trained Nurse.

HEALTH DEPARTMENT,
TOWN HALL,
BOOTLE.

May 1937.

*To the Mayor, Aldermen and Councillors
of the County Borough of Bootle.*

MR. MAYOR, MRS. COUNCILLOR SMITH, AND GENTLEMEN,

I have the honour to present the sixty-fourth Annual Report on the work of the Health Department.

Attention may be directed to the following features of interest during the year.

- (1) A rise in the birth rate to 22·2 per 1,000 of the population.
- (2) A rise in the death rate to 13·6 per 1,000 of the population.
- (3) A fall in the infantile mortality rate to 68 per 1,000 births, representing the lowest rate hitherto recorded in the Borough.
- (4) A death rate from all forms of tuberculosis of 1·34 per 1,000 of the population, being a maintenance of the slow improvement in this regard.
- (5) A low incidence of diphtheria, scarlet fever, and measles.
- (6) An increasing use of institutional provision for maternity cases and of the facilities available for dental treatment of expectant and nursing mothers.

I have pleasure in recording my indebtedness to the Chairman and members of the Health Committee for the sympathetic reception given to recommendations made for the maintenance and development of public health work in the Borough. In acknowledging the continued good service of my colleagues in the Department, I regret to record the death of Mr. J. C. Palmer, Chief Sanitary Inspector.

I have the honour to be,

Your obedient servant,

F. T. H. WOOD.

Medical Officer of Health.

STATISTICAL SUMMARY FOR 1936.

Population (Registrar-General's estimate) at mid-year 1936 ...	76,010
Area in Acres (exclusive of river bed)	1946·5
Population at Census of 1931	76,770

Census.	Per occupied dwelling.	
	No. of persons.	No. of families
1911	5·6	1·12
1921	5·6	1·17
1931	5·03	1·18

Inhabited houses (end of 1936) according to Rate Books ...	16,737
Uninhabited houses (end of 1936) according to Rate Books ...	331

	Total.	Males.	Females.		
Live Births—Legitimate ...	1,638	844	794		
Illegitimate ...	50	27	23		
Total ...	1,688	871	817	Birth Rate	22·2

Still Births, 67.	Rate per 1,000 total (live and still) births	38·2
Deaths	1,037	Death Rate 13·6

Number of women dying in, or in consequence of, childbirth—

	Deaths.	Rate per 1,000 total (live and still) births
From sepsis	—	—
From other causes ...	4	2·28
Death Rate of Infants under one year of age per 1,000 live births—Legitimate, 67; Illegitimate, 100; ... Total		68
Deaths from Measles (all ages)		8
Deaths from Whooping Cough (all ages)		7
Deaths from Diarrhoea (under 2 years of age)... ..		9
Death Rate from Respiratory Tuberculosis per 1,000...		1·16
Death Rate from all forms of Tuberculosis per 1,000...		1·34
Natural increase of the population during the year		651
Number of deaths of Infants (under the age of one year) ...		115

The Rateable Value of the Borough as at 1st April, 1936 was £507,675.

The estimated product of a Penny Rate for 1936-37 £1,910

In 1936-37 the General Rate was 13/9d. in the pound (excluding water rate and charges).

The cost of the Health Services during 1936-37 was estimated at £34,273, equivalent to a rate of 1s. 5·94d. in the pound.

COUNTY BOROUGH OF BOOTLE.
ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH

I.—VITAL STATISTICS.

Population.—At the Census in 1881 the population enumerated was 27,374; in 1891, 49,217; in 1901, 58,556; in 1911, 69,876; in 1921, 76,487; and in 1931, 76,770.

In May, 1937, the Registrar-General intimated that his estimate of population at mid-year 1936 was **76,010**, a decrease of 490 from the previous year, and this figure has been used in calculations of statistics throughout this report.

Births. — During the year there were registered 1,688 births to Bootle parents, representing a birth-rate of **22·2 per 1,000** of the population, that for England and Wales being 14·8. In 1935 the Bootle birth-rate was 21·4 and for the decennium 1926-1935 it was 22·4. There were 871 males and 817 females. It will be noted that the birth-rate, which reached a post-war maximum of 29·7 in the first quarter of 1920 and has since then progressively declined, except for checks in 1930 and in 1932, now shows an increase. The national birth-rate, which has always been lower than that for Bootle, also shows a small rise.

Period.	BOOTLE.		ENGLAND & WALES.
	Total Births.	Rate per 1,000.	Rate per 1,000.
1873—1880 ...	6,846	38·6	35·4
1881—1890 ...	15,508	36·8	32·4
1891—1900 ...	17,716	33·2	29·9
1901—1910 ...	20,468	32·3	27·2
1911—1920 ...	20,748	27·6	21·8
1921—1930 ...	18,884	22·8	18·4
1931 ...	1,667	21·6	15·8
1932 ...	1,768	22·9	15·3
1933 ..	1,652	21·4	14·4
1934 ..	1,644	21·4	14·8
1935 ...	1,636	21·4	14·7
1936 ...	1,688	22·2	14·8

The illegitimate births numbered 50, and were 3·0 per cent. of the total. In 1935 the total number was 54, and in 1934, 49.

Deaths.—The total number of deaths of Bootle residents during 1936, whether within or without the Borough, was 1,037; this figure includes 88 (excluding 51 deaths of “non-residents”) who died in institutions within the Borough, 464 who died in transferred institutions in Liverpool, 36 who died in hospitals outside the Borough, and 9 who died in mental hospitals, making a total of 597 deaths in institutions. The death-rate for 1936 was, therefore, **13·6 per 1,000** of the population, as compared with 12·8 in 1935, and 12·9 in 1934.

The death-rate in Bootle for the decennium 1921-1930 was 13·5, and for 1911-1920, 17·1. The crude death-rate of the 122 great towns of England and Wales during 1936 was 12·3. The table below demonstrates the general downward trend of both national and local rates since the beginning of the century.

Period.	BOOTLE.		ENGLAND & WALES
	Total Deaths	Rate per 1,000.	Rate per 1,000.
1873—1880 ..	3,823	21·7	21·2
1881—1890 ...	8,260	19·9	19·1
1891—1900 ...	10,942	20·6	18·2
1901—1910 ...	11,400	17·8	15·4
1911—1920 ...	12,470	17·1	14·3
1921—1930 ...	10,336	13·5	12·1
1931' ...	1,140	14·8	12·3
1932 ...	1,027	13·3	12·0
1933 ...	1,075	13·9	12·3
1934 ...	990	12·9	11·8
1935 ...	980	12·8	11·7
1936 ...	1,037	13·6	12·1

The death-rate during the first quarter of the year was 17·3, during the second, 12·5; the third, 10·0; and the fourth, 14·4.

The number of deaths which occurred in institutions was 597, *i.e.*, 58 per cent. of the total deaths, as compared with 60 per cent. in 1935.

and 55 per cent. in 1934. The increasing use made of institutions for the accommodation of cases of terminal illness is illustrated by the above figure, which compares with a percentage of 29 in 1920.

Comparability of Crude Death Rates.—If the populations of all areas were similarly constituted as regards the proportions of their sex and age group components, their crude death rates (deaths per 1,000 population) could be accepted as valid comparative measures of the mortalities experienced by the several populations.

In practice, however, populations are not thus similarly constituted and their crude death rates fail as true comparative mortality indexes in that their variations are not due to mortality alone but arise also from differences in their population constitution, the two elements being combined in indistinguishable proportions. In order to isolate the mortality factor it is first necessary to identify and remove the population variable.

For this purpose the Registrar-General has supplied a "Comparability Factor" by which the crude death rate of the area should be multiplied in order to make it comparable, from a mortality point of view, with the crude death rate of the country as a whole or with the mortality of any other local area, the crude death rate of which should be similarly modified with its own factor for the purpose.

In the case of Bootle the comparatively youthful nature of the population results in the comparability factor being 1.18 with a rise in the adjusted death rate to 16.0. The standardised death rate based upon the constitution of the 1901 population as regularly used by the Registrar-General in his annual reviews is, however, 13.2, a lower figure than the crude death rate.

Mortality in Relation to Sex.—There were 559 deaths of males, and 478 of females. This represents a male excess mortality of approximately 26.7 per cent. after allowing for the smaller proportion of males in the population. The causes chiefly accounting for male excess are in order of importance, pneumonia, pulmonary tuberculosis, congenital debility and malformation, including premature birth, and violence.

Mortality in Relation to Old Age.—The following table demonstrates the fact that people are surviving until later ages, and shows that the number of people surviving to the age of 65 and over has increased to such an extent this century that 37·1 per cent. of the deaths in Bootle at the present day are of persons aged 65 or over, whereas in the first decade of this century the contribution to the general death-rate made by persons over 65 was only 15·5 per cent. In other words, one in three may expect to live to 65, as compared with one in seven thirty years ago.

Period.	DEATHS.		Percentage over 65 Years.
	Total.	Over 65 Years.	
1901—1905 ...	5,671	849	14·8
1906—1910 ...	5,729	923	16·1
1911—1915 ...	6,259	1,197	19·1
1916—1920 ...	6,211	1,304	21·0
1921—1925 ...	5,230	1,352	25·8
1926—1930 ...	5,106	1,533	30·1
1931 ...	1,140	396	34·7
1932 ..	1,027	349	34·1
1933 ...	1,075	390	36·2
1934 ...	990	329	33·2
1935 ...	980	343	35·0
1936 ...	1,037	385	37·1

An examination of the ages at death of individuals in this age-group shows that there were 95 deaths at years 65 to 70, 119 deaths at years 70 to 75, 94 at years 75 to 80, 59 at years 80 to 85, 13 at years 85 to 90, 4 at years 90 to 95, and 1 at years 95 to 100.

Infantile Mortality.—There were 115 deaths of infants, compared with 150 in 1935, and 126 in 1934. The infantile mortality rate was **68 per 1,000** births, compared with 92 in 1935, and 88·5 in the decennium of 1926-1935. An examination of the factors underlying infantile mortality during the year is made on page 54.

The rate of infantile mortality amongst males was 76, and amongst females 60. Throughout England and Wales the rate of infantile mortality was 59 per 1,000 births, and in the 122 great towns it was 63.

The great decline in the infantile mortality rate began substantially in the decennium 1901-1910, during which period active measures were first instituted to secure such a reduction. The following table demonstrates in terms of lives saved what in fact such a decline really means.

DEATHS OF INFANTS UNDER ONE YEAR.			
Years.	Actual recorded Deaths.	Number which would have been recorded had the rate of mortality observed over 1901-10* still prevailed.	Saving.
1911—1915 ..	1434	1596	162
1916—1920 ...	1031	1474	443
1921—1925 ...	912	1480	568
1926—1930 ...	793	1314	521
1931 ...	159	247	88
1932 ...	152	262	110
1933 ...	146	241	95
1934 ...	126	243	117
1935 ...	150	242	92
1936 ...	115	250	135

* Rate of mortality 1901-1910 was 148 per 1,000 births.

From the above table it will be seen that in the decennium 1921-1930 Bootle saved 1,089 infant lives over and above what it was saving in the relatively good decennium 1901-1910, with further savings of 637 during the six subsequent years.

Fifty-four children died before they were a week old, and a total of 60, or 52·2 per cent., of all the deaths under one year, occurred in children under the age of one month. This is a neo-natal mortality rate of 35·5 per 1,000.

Young Child Mortality.—In 1936 there were 47 deaths of children aged 1 to 5 years, as compared with 56 in 1935. The principal causes were—pneumonia 17, measles 7, tuberculosis 4, whooping cough 3, diphtheria 3, diarrhoea 2, and violence 2.

Uncertified Deaths.—Sixty-six deaths (48 of residents and 18 of non-residents) were the subject of a Coroner's inquest, while in 47 cases the death was registered without certification by a medical man or a Coroner; this is equivalent to 4·5 per cent. of deaths uncertified.

CAUSES OF DEATH.

The causes of death, classified according to age, are shown in the table on page 70. The table below sets out the principal certified causes of death.

Year 1936.	No. of Deaths.	Proportion per 1,000 Deaths	
		Bootle, 1936.	England & Wales, 1935.
Bronchitis, pneumonia and other respiratory diseases	226	218	99
Cancer, malignant diseases	124	119	135
Diseases of heart and circulation ...	141	136	295
Tuberculosis (all forms)	102	98	62
Diseases of the nervous system	69	66	83
Prematurity and congenital debility ...	43	41	32
Violence	30	29	46
Diseases of digestive system	30	29	54

Epidemic Diseases.—The epidemic diseases (excluding influenza) were responsible for 39 deaths, as compared with the average of 75·3 during the preceding ten years. There were 8 deaths from measles, as against 26 in 1935; 8 deaths from diphtheria, the same number as in 1935; 7 deaths from whooping cough, as against 5; 2 deaths from scarlet fever, as in the previous year. The deaths from diarrhoea and enteritis were 13, as against 9 during 1935; nine were of children under two years of age.

Respiratory Diseases.—The death-rate from respiratory diseases rose somewhat from the relatively low figures that had been recorded in recent years. Pneumonia was responsible for 157 deaths, bronchitis for 53, and other respiratory diseases for 16, making the total deaths from respiratory diseases, (excluding influenza and tuberculosis) 226, or 21·8 per cent. of the total deaths at all ages, as compared with 179, or 18·3 per cent. in 1935. Influenza was entered as a cause of death in 11 cases, as against 12 in the preceding year.

The table below shows the seasonal nature of deaths from diseases of the respiratory system (excluding tuberculosis and influenza).

Month.	No. of Deaths.	Death-rate per 1,000 living.	Month.	No. of Deaths.	Death-rate per 1,000 living.
January	37	0·48	July	14	0·18
February	22	0·29	August	12	0·16
March	24	0·31	September	10	0·13
April	22	0·29	October	14	0·18
May	18	0·24	November	19	0·24
June	15	0·20	December	19	0·24

Cancer.—Cancer was registered as the cause of death in 124 cases, as compared with 120 in the preceding year. This represents a cancer crude death-rate of 1·63 per 1,000 of the population as compared with 1·01 during the years 1911 to 1920, with 0·78 per 1,000 during the first ten years of this century, and with 0·55 during the ten years 1891 to 1900. The corresponding rate for England and Wales in 1935 was 1·59 and in part the rise in incidence is a measure of the greater proportion of persons of higher age in the population, for a characteristic of malignant disease is its special tendency to attack those over middle age. In this connection the educative functions of the health service are exercised under the difficulty that the case for knowledge and action has to be made sufficiently impressive without arousing fears or creating obsessions, but it has been pointed out that the importance of the matter requires some risk of the latter to be run; for recognition of the early danger signals can be followed by early treatment with improved prospects of a favourable outcome.

ECONOMIC CONDITIONS.

Valuable information as to economic conditions having a bearing on the health of the town is obtained from data kindly supplied by the Clerk to the Public Assistance Committee, by the Ministry of Labour, and by the Clerk to the Bootle Insurance Committee.

It appears that during the year 1936 £109,746 12s. 0d. was expended in outdoor relief, including £55,269 8s. 0d. to unemployment cases (comparable figures for 1935 were £113,130 and £62,170). Further, the annual return of persons in receipt of Poor Relief on the night

of 1st January 1937 shows 511 persons to have been in receipt of institutional relief, of whom 69 were persons not suffering from sickness, accident, or bodily or mental infirmity, and 6,586 persons to have been in receipt of domiciliary relief, of whom 2,500 were relieved on account of unemployment. The total number of persons in receipt of Poor Relief on 31st December 1936 was equivalent to 926 per 10,000 of the population, as compared with 954 in 1935.

Returns of the Ministry of Labour show that at the undermentioned dates the following numbers of insured men and women were recorded as unemployed and resident in the Borough, namely:—

				Men.	Women.
28th January 1935	...	...	...	6,741	810
15th April 1935	...	...	...	6,999	710
22nd July 1935	...	...	...	6,334	768
21st October 1935	...	...	...	7,048	812
20th January 1936	...	...	...	6,968	899
27th April 1936	...	...	...	6,632	782
20th July 1936	...	...	...	6,393	771
26th October 1936	...	...	...	5,902	765

The following table summarises conditions as to unemployment and public assistance for the past seven years:—

Year.	Approximate monthly average of unemployed adult males.	Persons in receipt of relief on 1st January.		Total cost of outdoor relief.
		Institutional	Domiciliary	
1930	9202	481 (31/3/30)	2484	£ 36,268
1931	7598	475	2864	47,865
1932	7013	375	3936	64,999
1933	6926	455	5659	82,843
1934	6476	431	6871	107,807
1935	6780	410	7270	113,130
1936	6389	548	6751	109,747

As regards National Health Insurance, the total number of insured persons in the Borough on 1st October 1936 was 32,023, or 41·9 per cent. of the total population. There was an increase in the number of prescriptions made up during the year. It will be recalled that

the number of prescriptions dispensed for insured persons rose from 50,738 to 153,420 between 1921 and 1935, with a corresponding increase in the annual cost of medicines from £1,955 to £4,745 17s. 8d., while this year the experience is 157,565 prescriptions at a cost of £4,909 3s. 11d. In this connection the Chief Medical Officer of the Ministry of Health has pointed out that there are no known facts relating to the incidence of disease in the country which would account for this substantial increase in the amount of medicine consumed by the insured population, and that no body of well-informed medical opinion would contend that such consumption is necessary or desirable in the best interests of the health of the people.

II. GENERAL PUBLIC MEDICAL TREATMENT.

The control of the transferred medical services remains with the Public Assistance Committee, although in November 1931 the Council delegated to the Health Committee the powers contained in Part I of the Local Government Act, 1929, with respect to the provision of hospital accommodation.

INSTITUTIONAL ACCOMMODATION FOR THE SICK.

By agreement continuing until April 1950 arrangements have been made for the reception of Bootle sick into the hospitals transferred to the Liverpool City Council after the passing of the Local Government Act, 1929.

During the year the total admissions to the transferred hospitals numbered 4,205, of which figure, it may be noted, 2,286 were admissions on the orders of medical superintendents or masters, implying urgent conditions in which it was inadvisable to go through the ordinary routine of application to a Relieving Officer. In the form in which weekly returns are received it is not easy to ascertain with certainty the number of sick persons (hospital or infirmary patients) as contrasted with those not in need of medical service, but it appears that the average weekly totals of persons chargeable to Bootle in transferred institutions (including able-bodied adults) in the four quarters were respectively 583, 549, 322, and 559, showing a weekly average of 549 during the whole of the year. These figures do not include mental patients chargeable to the Authority, the average weekly number of whom was 188 during the year.

The following table, prepared by the Medical Officer of Health of Liverpool at the request of the Ministry of Health, gives a classification of such sick on 31st December 1936:—

CLASSIFICATION OF SICK IN INSTITUTIONS.

Classification of Wards.					Men	Women	Children under 16 years of age	Total
1.	Medical	...	...	...	42	37	2	81
2.	Surgical	...	...	...	27	14	—	41
3.	Chronic Sick*	...	...	...	21	29	1	51
4.	Children	...	...	..	—	—	48	48
5.	Venereal	...	...	..	—	1	1	2
6.	Tuberculosis	...	...	..	9	4	5	18
7.	Isolation	...	...	..	—	—	—	—
8.	Maternity	...	...	..	—	18	—	18
9.	Mental—							
	(a) Lunacy Act, 1890 ..							
	(i) Short Stay	..			8	—	—	8
	(ii) Long Stay	.			6	16	—	22
	(b) Mental Treatment Act							
	(i) Voluntary	..			—	—	—	—
	(ii) Temporary	...			—	—	—	—
10.	Mental Defectives	...	...		21	1	2	24
11.	Other	...	...		1	—	—	1
Totals ...					135	120	59	314

* Patients needing hospital treatment because they are suffering from some chronic disease; also aged infirm persons whose medical and nursing needs approximate to those of chronic patients.

DOMICILIARY MEDICAL ATTENDANCE.

The administration of medical out-relief included in the functions transferred to the Council on 1st April 1930 is controlled by the Public Assistance Committee acting through the Medical Officer of Health. For this purpose the Borough remained divided into three Districts, Districts Nos. 1 and 2 being under the care of a part-time District Medical Officer throughout the year, and District No. 3 being under the care of a temporary part-time Medical Officer until 31st March, after which date domiciliary medical attendance was provided by a panel of local practitioners. Drugs and medical requisites for Districts Nos. 1 and 2

were dispensed at Cyprus Grove, and such requirements for District No. 3 were dispensed on prescriptions made up by local chemists at charges assessed by the South-West Lancashire and Cheshire Joint (Prescriptions) Committee.

More than a four-fold increase in the demand on the services of the District Medical Officers has taken place since the transfer of Poor Law duties to the Council in 1930, as is illustrated by the following figures of average weekly attendance for medical treatment in the fourth quarter of each year from 1930, viz., 167, 221, 239, 314, 477, 550 and 784 respectively.

Examination of the returns of surgery consultations and home visits during the year showed the weekly average to have been 238 surgery consultations and 16 home visits in District No. 1, 81 consultations and 12 visits in District No. 2, and 157 consultations and 5 visits in District No. 3.

Open Choice System.—The open-choice system was established in District No. 3 as from 1st April 1936 when local practitioners agreed to provide domiciliary medical service at a remuneration of 3/6 per person treated per quarter. The Public Assistance Committee instituted this arrangement in spite of the realisation that the immediate cost would be much higher and that there would be a tendency to further increase with the removal of any deterrent factor attaching to the former system, for it realised that the system carried the following advantages:—

- (a) Attendance by the doctor of the patient's own choice.
- (b) A rise in the number of patients treated, an advantage only, of course, if it is conceded that deterrent factors hindering recourse to medical treatment should be removed or reduced.
- (c) Abolition of the impossible task formerly set to the District Medical Officer of treating eighty or more patients at a sitting.
- (d) Reduction of waiting time of patients through distribution of the volume of work over a large number of doctors.

Akin to this is the elasticity of the system which enabled the influenza epidemic of January—February 1937, to be handled in District No. 3 without alteration of the machinery, whereas the District Medical Officer of District No. 1 had to be provided with emergency assistance to cope with the increased number of patients. This elas-

ticity will also enable domiciliary medical service to be provided in the area shortly to be added to the Borough by gradual steps proportionate to housing developments.

The Borough Treasurer reported in February 1937 that the cost of the above medical services in District No. 3 during the nine months ended 31st December 1936 was £621 8s. 0d., and the cost of drugs and medical appliances was £650 6s. 2d.; allowing for a somewhat higher incidence of sickness in the first quarter of 1937, the Borough Treasurer estimated that the probable cost for the full financial year will be £925 for medical services and £975 for drugs and medical appliances as against £1,000 and £500 respectively provided in the estimates. It will be seen, therefore, that the only departure from expectation is in respect of drugs and medical appliances, the increased cost of which is due only in part to the great rise in the number of patients treated (1,656 in the first six months of the scheme as against approximately 950 in the corresponding six months of 1935-36). This increased popularity of medicine-taking extends, as is noted elsewhere, to National Health Insurance practice, and cannot in itself be regarded with satisfaction.

The complete position as to medical attendance in District No. 3 during 1936 is that during the first quarter there were 3,196 surgery consultations and 247 home visits by the District Medical Officer, and in the subsequent nine months there were 10,049 surgery consultations and 1,489 home visits paid by private practitioners.

VACCINATION.

According to information supplied by the Vaccination Officer, 1,215 successful primary vaccinations and four successful re-vaccinations were performed during the year ended 30th September 1936, as compared with the previous year's figures of 1,143 and six respectively.

Appendix 16 presents the Annual Return of the Vaccination Officer respecting vaccination of children whose births were registered from 1st January to 31st December 1935, inclusive.

III. SANITARY CIRCUMSTANCES.

Drainage and Sewerage.—The sewerage system is entirely by discharge into the River Mersey, with drainage areas and outfalls as described in the Report for 1930

Closet Accommodation and Scavenging.—Every house, with the exception of three in the outlying parts of Orrell, is provided with one water closet or more, the conversion of middens having been completed in 1910. Similarly all houses are provided with ashbins, the conversion of ashpits having been completed in 1932.

SANITARY INSPECTION OF THE DISTRICT.

The Staff for this work consists of the Chief Sanitary Inspector with four assistants, one of whom is engaged principally on special duties in connection with food inspection.

Nuisances.—On page 83 will be found a tabular statement showing the number of inspections made, and notices served by the Chief Sanitary Inspector. It will be noted that the number of nuisances for which notices were served on owners and occupiers was 5,031, as against 4,356 in 1935; the other work done under the Housing Acts is set out in the Housing Section of this report on pages 61 to 66.

Fertilizers and Feeding Stuffs Act, 1926.—Thirteen samples of feeding stuffs and three samples of fertilizers were obtained during the year.

Rag Flock Acts, 1911 and 1928.—There are no premises in the Borough where rag flock is manufactured, sold, or used.

Rats and Mice Destruction Act, 1919.—The occupiers of food shops, cafes, etc., have been frequently advised during the year as to the best means of ridding the premises of rats, and, in some cases, alterations of shops, and concreting of floors have been undertaken with excellent result. The Rat Officer has been advised of all complaints received, to which he has given special attention, but it should be remembered, the fertility of the rat being what it is, that the usefulness of his services cannot be measured in terms of rats caught, and that his work is justified in so far as he ensures the exclusion of rats from places that matter, such as food-stores and dwelling houses.

For National Rat Week in November advertisement of the fact of the responsibility of occupiers was inserted in the local Press, and requests were sent to horse keepers, millers, warehouse owners, etc., to make special efforts during the week, together with the circulation of a pamphlet giving suggestions as to suitable methods of ridding their premises of rats.

Common Lodging Houses.—There are four Common Lodging Houses in the Borough. They are all registered for the accommodation of men only, and between them have 168 beds. They were regularly inspected and a satisfactory standard of cleanliness was always maintained.

Canal Boats Acts, 1877 and 1884.—During the year 70 visits of inspection were made to canal boats on the Leeds and Liverpool Canal in the Borough. No written notices were served during the year, but five defects were remedied after verbal caution had been given.

Verminous Infestation.—During the year the problem of the prevalence of infestation of dwellings by bed-bugs continued to receive careful attention.

Occupied houses, both municipal and privately owned, found to be the subject of verminous infestation, were fumigated with sulphur, the picture rails, door architraves, wood skirtings, etc., in the affected rooms stripped out, and the walls subjected to a blow-lamp flame; the family bedding was treated by steam disinfection. Nine municipal houses and 40 privately-owned houses were so dealt with.

Vacant houses, both municipal and privately owned, found to be similarly infested, were treated in like manner, except that treatment of bedding was not called for. One hundred and two municipal houses and 12 privately-owned houses were so dealt with.

As to new tenancies, all tenants before taking up occupation of municipal houses have their furniture and effects treated by fumigation with hydrogen-cyanide at the Council's fumigation station at Pine Grove, and their bedding steam-disinfected; the furniture is loaded into a container, taken to the fumigation station for five hours' treatment, and delivered the same day to the new residence completely free of vermin.

Evidence of the success of the treatment is afforded by the fact that each of 321 tenants whose furniture and effects were dealt with during the year has been re-visited at intervals of six weeks, and careful inspection has failed to reveal any recurrence of the infestation. Of the 321 cases dealt with, 205 were treated by the Council's own plant, and 116 by private contractor.

Occupied houses, both municipal and privately owned, found to be the subject of infestation by cockroaches, were dealt with by taking up a portion of the floors in the affected rooms, thoroughly cleaning

out the spaces below the floors, spraying thereunder with Cromessol and finally dusting all places most frequented by the insects, i.e., kitchens, pantries, round sinks, and along hot water pipes, with a preparation composed of two parts of sodium fluoride to one part of pyrethrum powder. Treatment in this way has been found to be effective, as subsequent visits paid to the affected premises have failed to reveal any recurrence of the infestation. Thirty-three houses were so treated, of which number 11 were privately owned, and 22 owned by the Corporation.

Smoke Abatement.—Bootle is represented on the recently constituted West Lancashire and Cheshire Regional Smoke Abatement Committee, one of the objects of which is to bring about a more uniform administration of the law relating to the emission of smoke from chimneys. During the year that Committee also gave support to the following suggestions for the diminution of smoke nuisance:—

- (1) The installation of grates in new dwellings suitable for burning coke, together with inducements to use electricity or gas for heating purposes in rooms where a regular fire is not required.
- (2) The use of smokeless fuels in Corporation Offices and institutions in grates or furnaces adapted for the purpose.
- (3) The promotion of facilities for the sale of coke in small quantities from many shops and depots, either for use alone or mixed with raw coal.

Under Section 2 of the Public Health (Smoke Abatement) Act, 1926, a bye-law was made by the Council in December 1930 enacting that the emission of black smoke for a period of two minutes in the aggregate within any continuous period of thirty minutes from a chimney other than a dwelling house shall be presumed to be a nuisance.

There are approximately 81 industrial chimneys in the Borough, to which some 89 boilers of all types are connected. In eleven instances mechanical stokers of modern design are fitted, and in four instances oil fuel is in regular use; in addition there are some twelve furnaces used for metal smelting.

During the year 54 observations of chimneys were made, and in 23 instances smoke was noted as emitted in excessive quantities; in each case the premises were visited by the inspector, who investigated the cause and advised as to prevention. Intimation notices were also served in ten instances, and in one instance a statutory notice was served.

Shops Act 1934.—Under Section 10, which requires the provision of suitable arrangements for the health and comfort of shop-workers, 150 shops were visited during the year, and as a result improvements were effected which can be summarised as follows:—

Provision of sufficient sanitary conveniences	...	20
„ „ „ washing facilities	... ..	12
„ „ facilities for taking meals	... ..	7
„ „ suitable ventilation	... ..	19

SWIMMING BATHS.

The management of the two public baths in the Borough and the measures adopted to ensure a satisfactory condition of the water in each bath remain as described in the last report.

IV. SANITARY CONTROL OF THE FOOD SUPPLY.

One of the Sanitary Inspectors holding the special Food Certificate of the Royal Sanitary Institute is engaged for a large part of his time on work connected with the food supply, the sanitary supervision of which is undertaken in order to secure cleanliness in the preparation and distribution of foodstuffs, and to diminish the risk of possible infection thereof with disease-producing bacteria.

MILK SUPPLY.

Source of Milk Supply—That portion of the milk supply of the Borough not brought by rail or road is derived from cows kept in shippons, of which there are now 19 in the town; the cows number approximately 230, a further decrease from the pre-war figure of about 550. All the shippons received the careful attention of the Inspector, who paid 209 visits to them during the year. It is estimated that about one-quarter of the Bootle milk supply is derived from cows kept in these town shippons.

Dairies and Cowsheds.—*Milk and Dairies Orders 1915 and 1926.*—There are 70 premises registered as dairies or milkshops in the Borough, and 19 premises registered as cow-sheds. A careful routine inspection is maintained by the Inspector working in collaboration with the Veterinary Officer. Five hundred and seventy-one visits of inspection were made to cowsheds and dairies during the year, and in many cases as a result of suggestions made and advice given alterations were carried out with resulting improvement in condition; on the whole it may

be said that these premises are maintained in a satisfactory state. Extensive alterations were undertaken at one dairy in respect of the provision of steam for sterilising utensils; churns, and bottles, and the installation of a bottling machine, in order to qualify for a licence for the bottling of accredited milk.

Cleanliness and Safety of Milk.—A new Milk (Special Designations) Order came into force on June 1st 1936, prescribing the following special designations for milk, namely:—Tuberculin Tested, Accredited, and Pasteurised, and abolishing the previous designations—Certified, Grade “A” (Tuberculin Tested), and Grade “A.” Tuberculin Tested milk is derived from cows which have passed a veterinary examination and a tuberculin test, and must satisfy a prescribed methylene blue reduction test for cleanliness, and further must contain no coliform bacillus in one-hundredth of a millilitre. Accredited milk is raw milk from cows which have passed a veterinary examination, and must satisfy the same bacteriological tests as are prescribed for tuberculin tested milk. Pasteurised milk has to be retained at a temperature of not less than 145° and not more than 150° Fahrenheit for at least thirty minutes, and then be immediately cooled to a temperature of not more than 55° Fahrenheit; it shall contain not more than 100,000 bacteria per millilitre. When regard is had to the fact that freedom from infection with tuberculosis is the important desideratum, it will be admitted that there are objections to the use of the term “Accredited” as implying a degree of safety which the milk does not in fact possess. At the end of 1936 there were three Bootle dairymen holding licences to produce Accredited milk.

With the object of promoting the cleanliness and safety of the local supply, bacteriological examination of milk samples has not been limited to the designated milks, and 108 examinations in all were made during the year. The results in 77 samples of milk, other than Pasteurised, may be summarised thus:—

(a) Of 27 samples of Accredited Milk, 22 were up to standard, and five failed to conform to the requirement of the absence of coliform bacilli in one-hundredth of a millilitre.

(b) Of 50 samples of ordinary milk, 18 were of “Accredited” standard by both tests, 11 satisfied the requirement for “Accredited” as to total bacterial content, and in seven instances only was the milk found to be really dirty.

CLEANLINESS OF MILK.

Year	No. of Samples.	Percentage of Samples			
		Very satisfactory	Satisfactory	Dirty	Very dirty
1924	12	—	—	25	75
1925	28	4	7	43	46
1926	28	25	18	25	32
1927	30	23	13	28	36
1928	32	16	19	40	25
1929	32	28	28	31	13
1930	34	24	32	29	15
1931	44	34	27	28	11
1932	37	32	19	36	13
1933	47	17	26	32	25
1934	67	20	31	34	15
1935	61	12	26	33	29
1936	50	36	22	28	14

Milk and Tuberculosis.—The results of bacteriological examination of 100 samples of milk showed that seven samples were infected with tubercle bacilli. In one instance the milk was produced from cows in a Bootle shippon; in this case a fat cow had been sold out of the herd and slaughtered between the date when the sample was taken and the date of report by the bacteriologist; further examination, both veterinary and bacteriological, showed that the remaining cows in the herd were free from infection. Of the remaining six samples, the milk was produced at farms in the Lancashire County area; two of the samples were from one farm, where the infected cow was traced and slaughtered under the Tuberculosis Order, 1925; in a third case also the infected animal was found and slaughtered, but in the remaining three cases the source of infection could not be traced.

Pasteurised Milk.—The Chief Medical Officer of the Ministry of Health has remarked that although cleanliness of milk is important from an aesthetic and commercial standpoint it is no safeguard against infection conveyed in the milk from a tuberculous cow. Safety is the really important consideration, and in present circumstances the ordinary raw milk supply can never be regarded as safe, and to ensure its freedom from disease-producing organisms efficient pasteurisation is necessary.

During the past year in Bootle two licences were renewed for the production of pasteurised milk. The number of milk samples obtained

from these two licence holders during 1936 was 23, of which 22 conformed to the requirements of the Ministry of Health.

PREPARATION OF ICE CREAM.

Boottle Corporation Act, 1930, Section 21, requires the registration of persons and premises used for the manufacture, etc., of ice cream, and gives powers for revocation of the registration of such persons if the Corporation is satisfied that the public health is, or is likely to be, endangered by any act or default of such persons.

At the end of the year the registrations totalled:—

PREMISES—

For the manufacture for sale and sale of ice cream ..	...	58
For the sale only of ice cream ...	...	59

PERSONS—

For the manufacture for sale and sale of ice cream ...	...	58
For the sale only of ice cream ...	...	67

These special powers of supervision were obtained because of the necessity of ensuring the wholesomeness of milk products eaten largely by children, and during last season 86 visits of inspection were made to registered premises, and 20 samples were obtained and submitted for bacteriological examination as affording at present the most reliable index of the degree of cleanliness reached in the production of the ice cream. The following table sets out the results of such examinations.

BACTERIAL COUNTS IN ICE CREAM.

Year.	No. of Bacteria per c.c.				Coliform Bacilli.	
	Over 1,000,000	Between 500,000 and 1,000,000	Between 100,000 and 500,000	Under 100,000	Absent in 1/100 c.c.	Present in 1/100 c.c.
1936	9	4	3	14	15	15
1935	2	6	5	11	11	13
1934	3	1	8	3	4	11
1933	6	3	7	6	6	16
1932	4	2	1	12	10	9

MEAT AND OTHER FOODS.

Butchers' Shops.—There is no slaughterhouse in the Borough, and the inspection of meat is confined to butchers' shops, food factories and cold stores. There are 75 butchers' shops, to which 609 visits of inspection were made during the year. On 25 occasions unsound and diseased meat was found in shops and food factories; the bulk of the diseased meat had been previously inspected outside the Borough, in which cases the authorities concerned were notified. In general the standard of cleanliness of butchers' shops in the Borough is high.

Public Health (Meat) Regulations, 1924.—It was necessary on 19 occasions to warn tradesmen respecting contraventions of the Regulations. Frequent visits of inspection are made to shops and premises, and vehicles containing meat are regularly inspected for general cleanliness.

Public Health Act, 1925.—Under Section 72, which provides for the cleanliness and sanitary conditions of premises where food is prepared or stored for sale it was necessary on 8 occasions to serve notices on occupiers of premises in respect of unsatisfactory conditions.

Merchandise Marks (Imported Goods) No. 7 Order, 1934.—This Order requires the marking of imported meats with an indication of origin on exposure for sale, *e.g.*, Brazil, Argentine, New Zealand; and is a safeguard for the buying public inasmuch as imported frozen or chilled meats are appropriately marked. Some 236 visits of inspection were made, and except in a very few cases, the provisions of the Order were observed.

Merchandise Marks Act, 1926.—The Act provides for the marking of imported food stuffs (fresh apples, butter, currants, raisins, sultanas, eggs, raw tomatoes, and honey). Some 98 visits of inspection were made under this Act, and except in comparatively few instances the origin of the produce was found to be indicated.

Fishmongers' Shops. — There are 22 shops in the Borough from which fresh fish is sold, and 49 visits of inspection were made during the year. These shops are maintained in satisfactory condition.

Fish Frying Shops.—The trade of fish frying is carried on at 41 shops, to which 86 visits of inspection were made during the year. Suggestions were made from time to time to occupiers regarding

methods of preparation, installation of ranges, etc., and considerable improvement resulted, and although there are no bye-laws in force in the Borough with respect to these premises, they are maintained in a satisfactory condition.

Disposal of Unsound Food.—The amount of unsound food detected is shown in the table below; all was voluntarily surrendered.

				Tons.	Cwts.	Qrs.	Lbs.
Raw meat	...	...	...	1	4	2	5
Canned meat	...	...	...	1	4	0	8
Canned fruit	...	...	...	3	4	0	16
Canned fish	...	...	...	—	8	1	14
Canned milk	...	...	...	1	18	3	17
Canned beans	...	...	...	—	4	2	12
Jam	...	...	...	—	9	1	19
Tomatoes	...	...	...	—	1	0	20
Tripe	...	...	...	—	—	—	24
Pickles	...	...	...	—	—	—	21
Lemons	...	...	...	—	—	1	14
Potatoes	...	...	...	18	9	0	0
Cheese	...	...	...	—	—	2	9
Apples	...	...	...	—	3	0	0
Meat pies	...	...	...	—	—	—	9
Total				27	8	2	20

Several methods of disposal of unsound food were utilised. Most of the butchers' meat was destroyed under the supervision of the Inspector at the Corporation Destructor, Pine Grove. A proportion of the canned meat was permitted to be used, under supervision, for the preparation of animal food, whilst the remainder was used for pig feeding at three of the piggeries in the Borough; the deliveries were checked on arrival, and the Inspector saw that they were so disposed of as to make it impossible for this food to be used for human consumption.

Food Factories.—There are 16 food factories in the Borough and a systematic inspection is carried out, 193 visits of inspection having been made during the year. Although maintained in a very satisfactory

condition, on occasions warnings were given respecting lack of cleanliness of the premises. 46 premises are now registered under the Bootle Corporation Act, 1920, as used for the preparation of potted or preserved foods.

Bakehouses.—There are 17 bakehouses (5 being underground) and 22 confectionery bakehouses. 103 visits of inspection were made during the year. The general condition is good.

Cold Stores.—These premises are regularly inspected and are maintained in satisfactory condition; 27 visits were made. One of the stores is a Registered Egg Store, but no marking of shell eggs under the Ministry of Agriculture's Regulations was undertaken during the year.

Food and Drugs (Adulteration) Act, 1928.—The Public Analyst, to whom samples are submitted, is Mr. W. H. Roberts, M.Sc., F.I.C.

Table 9 on page 87 shows that 290 samples were taken, of which 13, or 4.48 per cent., were adulterated or not up to standard. Two hundred and seventy-five of these were taken informally, and in cases where adulteration was detected formal samples were subsequently obtained in order that the necessary legal action might be instituted. One hundred and twenty-five samples of milk were obtained, of which 114 were taken informally; in the other 11 cases, however, the procedure prescribed by the Act was adopted. Nine of the milk samples (2 formal, 7 informal) were found to be adulterated.

The total number of samples obtained of milk produced outside the district and taken in course of delivery was 52.

As regards the nine milk samples reported upon adversely, the vendor in one case was prosecuted and fined 20/- and ordered to pay the Analyst's fee of 21/-. Two other of these cases were in respect of informal samples taken from churns deposited in a cold store; these were followed up by taking of formal samples, which were declared on purchase to be "separated" milk. The vendor in these cases was prosecuted in three instances for permitting churns to be used, not being marked "Separated" milk, and was fined 40/- and 10/6 costs in each case. In the remaining six cases the departure from normal being slight, the vendors were interviewed and cautioned.

The Public Analyst has kindly supplied the results of the analyses of every sample of milk submitted to him from Bootle, and it is interesting to note that, including the samples returned "not genuine," the average amount of fat was 3·73 per cent., and of non-fatty solids 8·86 per cent., the minimum standard fixed by the Board of Agriculture in the Sale of Milk Regulations, 1901, being 3 per cent. fat and 8·5 per cent. non-fatty solids, below which figures milk is presumed to be not genuine.

Fifteen samples of condensed milk were submitted to the Analyst, who certified that they were correctly labelled as provided by the Public Health (Condensed Milk) Regulations, 1923-1927; thirteen samples were found to be genuine, and two to be slightly deficient in non-fatty milk solids; in each of these two cases the wholesaler was written to and cautioned.

Public Health (Preservatives, etc., in Food) Regulations, 1925-1927.—Reference to the table on page 88 shows that 219 samples were examined under these Regulations for the presence of preservatives, including 125 of milk and 4 of cream.

Two vendors were cautioned for not exhibiting statutory labels declaring the presence in sausages of a preservative which was found to be present.

V. PREVALENCE OF NOTIFIABLE DISEASES.

Zymotic Diseases.—During the year there were 39 deaths from the seven principal zymotic diseases, viz., small pox, measles, whooping cough, diphtheria, scarlet fever, diarrhoea, and fever (including typhoid, enteric, and typhus). This is a death rate of 0·51 per 1,000 of the population; it compares with a decennial rate for 1926-35 of 0·93.

The number of cases of infectious diseases notified during the year is briefly summarised below, and fuller detail is given in Table 2, page 69.

There was no notification of small pox, cholera, plague, typhus fever, relapsing or continued fever, puerperal fever, trench fever, or dysentery.

	Cases notified.	Cases admitted to hospital.	Deaths.
Enteric Fever	8	5	1
Scarlet Fever	190	153	2
Diphtheria	129	126	8
Puerperal Pyrexia	10	9	—
Ophthalmia Neonatorum	9	2	—
Erysipelas	51	25	7
Infantile Diarrhoea (under two years)—voluntarily notifiable .	11	—	9
Influenzal Pneumonia	17	7	—
Acute Primary Pneumonia	129	50	82
Cerebro-spinal Meningitis	9	9	1
Encephalitis Lethargica	1	—	—
Malaria	2	1	—
Poliomyelitis	1	—	—
Tuberculosis—			
(a) Pulmonary	166	98	88
(b) Non-Pulmonary	42	20	14

SCARLET FEYER.

Incidence.—The last outbreak of scarlet fever on a large scale occurred in 1933, and the period of low prevalence which followed continued until the fourth quarter of 1936, when there was a sharp rise with 85 cases notified; the total for the year was 190, constituting an incidence of 2·48 per 1,000 of the estimated population, compared with 2·14 in 1935 and 3·63 in 1934, and a rate of 2·53 per 1,000 for England and Wales.

Mortality.—There were two deaths from scarlet fever during the year; this is equivalent to a mortality rate of 0·03 per 1,000 of the population, as compared with 0·01 per 1,000 for England and Wales. The table below shows that Bootle, in common with other areas in South West Lancashire, has usually returned higher scarlet fever mortality-rates than the country as a whole, although the experience of the last four years is equivalent to a reduction to one-twelfth of the rate obtaining at the end of last century, and to one-thirty-fifth of the rate of sixty years ago.

Period	BOOTLE.		England & Wales.
	No. of Deaths.	Rate per 1,000	Rate per 1,000.
1873-1880 ..	188	1·06	0·73
1881-1890 ..	165	0·39	0·34
1891-1900 ..	202	0·37	0·16
1901-1910 ..	160	0·25	0·11
1911-1920 ...	70	0·11	0·05
1921-1925 ..	36	0·09	0·03
1926-1930 ..	22	0·05	0·01
1931 ...	1	0·01	0·01
1932 ..	5	0·06	0·01
1933 ..	2	0·03	0·02
1934 ...	2	0·03	0·02
1935 ..	2	0·03	0·01
1936 ...	2	0·03	0·01

In each of seven houses two cases of scarlet fever occurred, and in two houses there were four cases, and in one house there were five cases.

Hospital Isolation in Scarlet Fever.—One hundred and fifty-three Bootle cases, or 80 per cent. of the cases notified, were admitted to Linaere Hospital, with two deaths.

Return Cases.—During 1936 there were two instances in which the discharge of scarlet fever cases from the hospital was followed by the occurrence of a new case or cases in the home. The return case rate was equivalent to 1·4 per cent. of those discharged, as compared with 2·1 per cent. in 1935.

DIPHTHERIA.

Incidence.—The period of relatively high diphtheria incidence dating from 1927 was interrupted last year, during which 129 cases only were notified as compared with 199 during 1935, and an average of 189 for the ten years ended 1936. The incidence was 1·69 per 1,000 of the estimated population, and the case fatality was 6·2 per cent. One hundred and twenty-six, or 98 per cent. of those notified, were removed to hospital. No case required tracheotomy during the year.

The occurrence of a secondary case of diphtheria in an infected household was recorded on nine occasions, and the occurrence of a third case on three occasions.

Mortality.—The table which follows demonstrates the gravity of the type of infection, due apparently to infection with a more virulent organism producing rapid and severe toxæmia, which prevailed in 1934, and the reversion to a milder type which has obtained during the last two years.

Period.	BOOTLE.		England & Wales.
	No. of Deaths.	Rate per 1,000.	Rate per 1,000.
1875-1880 ...	43	0·24	0·13
1881-1890 ...	92	0·22	0·16
1891-1900 ..	136	0·24	0·32
1901-1910	120	0·18	0·19
1911-1920	132	0·18	0·14
1921-1925 .	32	0·08	0·09
1926-1930 .	39	0·09	0·08
1931 ..	14	0·18	0·07
1932 ...	13	0·17	0·06
1933 ...	21	0·27	0·06
1934 ...	36	0·46	0·10
1935 ...	8	0·10	0·08
1936 ...	8	0·10	0·07

Prevention.—During 1932 a scheme was inaugurated whereby an offer of immunisation against diphtheria was made to the parents of infants and young children in the Borough. Such protection can be conferred without risk to the child and without any disturbance of health by the administration of three injections at, say, fortnightly intervals of a toxoid-antitoxin mixture which stimulates the body to produce immunity against subsequent exposures to infection; the immunity is not absolute and is not produced instantaneously, but increases steadily through a period of several weeks or months.

The following tabular statement classifies the children who completed the series of inoculations during 1936, making, with those inoculated in the preceding years, a total of 4,079.

Place of Treatment.	Total.
Elementary Schools	644
Infant Clinics	147
Linacre Hospital	22
Total ...	818

Hitherto, there have been 24 instances of diphtheria in the 3,266 inoculated children; particulars of twenty-one cases have been given in the previous annual reports. During 1936, notifications of diphtheria in two inoculated children were received, but subsequent examinations in hospital caused the diagnosis to be revised to follicular tonsillitis.

OTHER ZYMOTIC DISEASES.

Enteric Fever.—Eight notifications of enteric fever were made during the year. One case occurred in February, and the other seven during the summer months; with the exception of two cases in one family, no connection between the cases could be established, nor was there any obvious association between this series and the outbreak which developed at the end of the year in the north of Liverpool.

Influenza.—Seventeen notifications of influenzal pneumonia were received, and 11 deaths from influenza were recorded. These figures are indicative of the freedom of the town from influenza in an epidemic form, except during the first weeks of the year.

Measles.—During 1936 measles caused eight deaths, compared with 26 in 1935, and an average of 20·1 during the ten years ended 1935. The Bootle death-rate from this cause was 0·10 per 1,000, compared with 0·07 throughout England and Wales.

Complete information as to the incidence of measles is not now available, but during the year 70 cases occurring in school children were reported under the Bootle Corporation Act, 1920

The table which follows sets out the reduction in the mortality from measles which has occurred throughout England and Wales since 1890; it also shows that although some degree of reduction has been obtained locally the measles death rate for Bootle is still high, and comparison with the corresponding tables for scarlet fever and diphtheria demonstrates the greater importance of measles as a killing disease.

Period.	BOOTLE.		England & Wales
	No. of Deaths.	Rate per 1,000.	Rate per 1,000.
1891-1900 ..	165	0·30	0·41
1901-1910 ...	294	0·45	0·31
1911-1920 ...	266	0·37	0·28
1921-1925 ..	112	0·27	0·12
1926-1930 ...	85	0·20	0·10
1931 ..	13	0·17	0·08
1932 ...	40	0·52	0·08
1933 ...	11	0·14	0·05
1934 ...	26	0·34	0·09
1935 ...	26	0·34	0·03
1936 ..	8	0·10	0·07

Whooping Cough.—Whooping Cough caused 7 deaths during 1936 compared with 5 in 1935 and 2 in 1934. The death-rate was 0·09 per 1,000 of the population, compared with 0·05 throughout England and Wales. There is still much to be done in educating the public up to the knowledge of the fact that measles and whooping cough (so-called minor infectious diseases) are responsible year by year for many preventable deaths.

Diarrhoea.—Deaths from this disease numbered 13, or a rate of 0·17 per 1,000 of the population as compared with 0·12 last year. Nine of the deaths occurred in children under the age of two years, giving a rate per 1,000 births of 5·3 in Bootle, as compared with 5·9 throughout England and Wales.

The arrangements instituted in previous years by which this disease is notifiable during the third quarter of the year were continued, and 11 notifications were received, as compared with 29 in 1935 and 26 in 1934. The receipt of these notifications enabled instruction on the necessary sanitary precautions against the spread of infection to be given by the Infant Welfare Visitors, as well as nursing attention to be given by the Bootle District Nurses' Association.

LINACRE ISOLATION HOSPITAL.

Linacre Isolation Hospital, by arrangements with the respective Authorities, receives cases of infectious diseases from the urban districts of Litherland and Formby, as well as from the borough.

The year 1936 showed a decrease in cases admitted, the total being 385 as against 429 in 1935. The following table gives particulars of the cases admitted to the infectious disease wards, while particulars of cases in which the diagnosis was revised are given in Appendix 17, page 96.

CASES TREATED IN THE INFECTIOUS DISEASE WARDS, LINACRE HOSPITAL.

DISEASE.	No. in hospital on 1st. January 1936				No. admitted during the year.				No. discharged during the year				No. died during the year.				No. remaining in hospital 31st. December 1936.			
	Bootle	Lither-land	Formby	Total	Bootle	Lither-land	Formby	Total	Bootle	Lither-land	Formby	Total	Bootle	Lither-land	Formby	Total	Bootle	Lither-land	Formby	Total
Scarlet Fever.	10	4	—	14	144	29	1	174	115	28	1	144	2	—	—	—	37	5	—	42
Scarlet Fever complicated by other disease.	1	—	—	1	1	—	—	1	1	—	—	1	—	—	—	—	—	—	—	—
Admitted as Scarlet Fever but diagnosis revised.	—	—	—	—	8	3	—	11	6	1	—	7	—	—	—	—	3	2	—	5
Diphtheria.	11	3	3	17	70	9	1	80	63	10	4	77	7	1	—	—	11	1	—	12
Diphtheria complicated by other disease.	—	—	—	—	1	—	—	1	1	—	—	1	—	—	—	—	—	—	—	—
Admitted as Diphtheria but diagnosis revised.	5	1	—	6	55	11	1	67	59	12	1	72	—	—	—	—	1	—	—	1
Other diseases	3	—	—	3	48	2	1	51	46	2	1	49	3	—	—	—	2	—	—	2
TOTALS	30	8	3	41	327	54	4	385	201	53	7	351	12	1	—	—	54	8	—	62

No case of tracheotomy was performed during the year.

Cross-Infection.—The following cases of cross infection arose during the year. One case admitted as diphtheria, but not suffering from it, contracted whooping cough; and one case admitted as scarlet fever, but not suffering from it, contracted scarlet fever in the ward.

Health of Staff.—Staff sickness was as follows during the year. One nurse contracted erythema nodosum and was warded for 35 days; one nurse contracted faucial diphtheria and was warded for 84 days; one nurse contracted cellulitis of ankle and was warded for 21 days; one nurse contracted axillary abscess and was warded for 21 days.

During the year 17 nurses were Schick-tested and Dick-tested to determine their susceptibility to diphtheria and scarlet fever. Of these, eight re-acted positively to the Schick-test and none re-acted positively to the Dick-test; the eight nurses were immunised against diphtheria.

Bacteriological Laboratory Work—

Examinations required.	Positive result.	Negative result.	No. of Specimens examined.
Swabs for Diphtheria ...	142	2574	2716
Sputa for Tubercle Bacilli	163	852	1015
	305	3426	3731

In addition, 100 samples of milk, 713 specimens for venereal disease, 16 swabs for diphtheria, and 41 miscellaneous specimens (including 30 of ice cream) were examined in the Pathological Department of the Liverpool University, or other Pathological Laboratory.

VI. TUBERCULOSIS.

Notification Register.—The Tuberculosis Notification Register contains the names of all persons notified as suffering from tuberculosis since the first operation of the Public Health (Tuberculosis) Regulations, 1911, after making corrections by the removal of names of those

who have died, left the district, have been cured, or have been pronounced not to be suffering from tuberculosis. The register on 31st December included 313 males and 255 females suffering from pulmonary tuberculosis, and 115 males and 147 females suffering from non-pulmonary tuberculosis, make a total of 830 cases.

Incidence.—The total number of new cases coming to the knowledge of the Medical Officer of Health during 1936 was 208, as compared with the figures of 246, 242, 212, 251, 258 and 231 in the years from 1930 onwards.

The following table sets out the age and sex distribution of notifications and deaths due to tuberculosis during the year under review:—

Age Periods	New Cases notified				Deaths.			
	Respiratory		Non-Respiratory		Respiratory		Non-Respiratory	
	M	F	M	F	M	F	M	F
0—1 year ...	1	...	...	2	...	...	...	...
1—5 years ...	1	3	2	6	1	...	1	2
5—15 „ ...	6	9	5	5	...	...	1	...
15—25 „ ...	18	27	6	6	8	19	2	2
25—35 „ ...	16	13	...	3	8	5	...	2
35—45 „ ...	22	5	2	2	10	3	1	...
45—55 „ ...	17	11	...	...	13	2	...	.
55—65 „ ...	9	5	2	...	8	3	2	...
65 and upwards	4	5	...	1	4	4	...	1
Totals ...	94	72	17	25	52	36	7	7

Mortality.—The number of deaths caused by tuberculosis during 1936 was 102, or one death in every ten, giving a death-rate from this cause of 1·34 per 1,000 of the population, as compared with 1·17 in 1935 and 1·37 in 1934; it was 1·44 for the ten years ended 1935.

This represents a continuance of the decline in the tuberculosis mortality-rate recently recorded in Bootle, and set out in the following table:—

Period.	BOOTLE.		England & Wales.
	No. of Deaths.	Rate per 1,000.	Rate per 1,000.
1891-1900 ...	1106	2·17	2·01
1901-1910 ...	1127	1·76	1·65
1911-1920 ...	1370	1·82	1·42
1921-1925 ...	652	1·70	1·08
1926-1930 ...	572	1·49	0·94
1931-1935 ...	537	1·39	0·81
1936 ...	102	1·34	

From the above table it may be calculated that in the last six years the deaths from tuberculosis in Bootle have been 362 less than would have been the case if the mortality rate experienced in 1891-1900 had continued.

Dispensary Register.—A register is maintained of all cases of tuberculosis receiving public medical treatment. This Dispensary Register contains the names of all persons attending at, or seen in connection with, the Dispensary for diagnosis or for treatment of tuberculosis, including patients under general supervision (whether or not accompanied by domiciliary treatment), and patients or observation cases in residential institutions, and contacts. On December 31st 1936 the number of persons so classified and on the register was 583, as against 637 on January 1st 1936.

PULMONARY TUBERCULOSIS.

Incidence.—One hundred and sixty-six new cases suffering from pulmonary tuberculosis were notified during 1936. The number includes

36 cases not formally notified. The numbers notified in the five preceding years were 184, 154, 173, 173, and 145 respectively. In the case of nine the first intimation was obtained from the death returns, while in 18 other cases notification was made at intervals of less than three months before death. The non-notified deaths, therefore, numbered 10·2 per cent. of the total of 88 deaths from pulmonary tuberculosis. Enquiry into these non-notified cases showed the omission to have been on the part of institution medical officers in three instances, and private practitioners in six instances.

Mortality.—During the year 88 deaths were certified to be due to pulmonary tuberculosis, representing a rate of 1·15 per 1,000 of the population, as compared with 1·04 in 1935 and 1·17 in 1934. The age period most affected was early adult life with 40 deaths between the ages of 15 and 35, and the usual sex disparity was shown, there having been 52 deaths among males and 36 among females.

Tuberculosis Visitors: Home Visitation.—Four tuberculosis visitors, one of whom assists in the medical work of the Dispensary, and three of whom are engaged also on work in connection with Maternity and Child Welfare, are responsible for the sanitary supervision of the homes of notified and suspected cases. Every effort is made by the Visitors to make their calls helpful to the comfort of the patient and a stimulus to the care exercised in preventing infection of others in the household. The visits totalled 2,556 (2,027 of which were for dispensary purposes) in the year under review.

Housing of Tuberculosis Cases.—A significant factor in the production of new cases of tuberculosis is the prolonged contact of young children with a patient or other inmate of the house who is suffering from pulmonary tuberculosis in an infectious stage; such prolonged contact is obviously obtained when an open case shares a bedroom with other persons. An estimate of the extent to which such a position exists in the Borough can be formed by consideration of the following table showing the sleeping accommodation, as at 31st December 1936, of all cases of pulmonary tuberculosis other than those marked quiescent

or arrested, although it should be realised that not all of the cases included are in fact in an infectious stage.

(a) Total number of cases on 31st December 1936 ...	227
(b) Number having separate bed and bedroom ...	97
(c) Number having separate bed only	14
(d) Number not having a separate bed	116

Rent Assistance Scheme.—With a view to reducing the risks of child infection, the Council has since April 1935 had in operation a scheme for (a) the allotting of houses by the Housing Committee to cases of infectious pulmonary tuberculosis who contract to comply with the simple health requirements of the Tuberculosis Officer, first amongst which is the sole occupation of a bedroom by the patient, and (b) the establishment in cases so housed of a scheme of rent assistance by the Health Committee, whereby the superior accommodation, and hence the protection of the healthy members of the family, is obtained without detriment to the nutritional needs of the family.

At the end of the year there were 33 families comprised within the scheme, the total rent subsidy then being borne by the Health Committee amounting to £4 6s. 9d. weekly. Further eleven patients recommended awaited allocation of houses.

Tuberculosis Dispensary.—The Dispensary is the central element of the tuberculosis scheme, and serves as a clearing house from which some cases are transferred to sanatorium, others to hospital, and others to their own medical attendant for domiciliary treatment, while a certain proportion remain in attendance at the clinics held nine times fortnightly and receive necessary treatment therefrom. As far as possible, however, this last aspect of the functions of the Dispensary is limited to the provision of specialist treatment not at the disposal of the general practitioner.

During the year 237 new cases, of whom 91 were sent by private practitioners, 27 by the Public Assistance Medical Officers, 12 by the Ante-Natal Clinic Medical Officer, and 23 by the School Medical Officer, for opinion preliminary to notification, were examined at the Dis-

pensary. Attention continued to be paid to securing the attendance for examination of contacts of notified cases, and during the year 133 were so examined.

The total attendances at the Dispensary during the year numbered 6,127, as compared with 6,411 in 1935; 657 specimens of sputum were examined, giving a positive result in 52 cases.

Radiographic Examinations.—Since the installation of an X-ray apparatus at the Health Centre in June 1934 increased use has been made of radiography in diagnosis and control of treatment. During the year the total of X-ray examinations numbered 567, and the cost of materials and maintenance (excluding electric current and capital charges) was approximately £96; this position compares with a total of 208 examinations done for the dispensary by outside authorities during 1933-34 at a total cost of approximately £224. The average number of X-ray examinations made is now 556 per 100 deaths from tuberculosis, as compared with 88 per 100 in 1931 and 440 per 100 in 1935.

Maghull Sanatorium.—During the year 44 patients were admitted to the Sanatorium with an average length of stay of 147 days for the 44 cases discharged during the year. Information is given in Section (G) on Form T.145 of the Ministry of Health on pages 75 and 76 of the results of treatment in Maghull Sanatorium and Linacre Hospital during the year.

Linacre Hospital Tuberculosis Pavilion.—During 1936, 60 Bootle cases were admitted to the Pavilion, the average length of stay of the 63 cases discharged (including 15 deaths) during the year being 116 days.

Artificial Pneumothorax Treatment.—Treatment by induction of artificial pneumothorax, in order to secure collapse of the affected lung, was adopted at Linacre Hospital first in 1924, in cases selected on lines described in the last Annual Report.

Twenty-six cases have so far been considered suitable for this treatment. Ten of the cases have died, and a tabular statement gives the results of treatment in the other cases

RESULTS OF ARTIFICIAL PNEUMOTHORAX TREATMENT.

Number.	Beginning of treatment	Cessation of treatment	Length of treatment	Other treatment given	Condition to date	Time since treatment ceased
2.	18/7/25	25/4/27	21 months	Hospital	Not examined recently; known to be working	9½ years
4.	11/12/26	—	6 years	Sanatorium	In Papworth Village Settlement. Working.	4 years
6.	18/10/29	9/1/32	27 months	Hospital	Condition remains arrested. Fit for work, but not working.	5 years
8.	17/9/30	9/1/32	16 months	Hospital	Left district.	5 years
10.	11/11/32	17/3/34	16 months	Hospital	Left district 19th February, 1935.	33 months
13.	2/5/33	7/2/34	9 months	Hospital	Disease of chronic type; still active.	33 months
14.	27/7/33	1/9/34	13 months	Hospital	Disease arrested. Is working.	28 months
16.	28/4/34	5/7/35	15 months	Hospital	Disease still active. Has now left district.	17 months
17.	21/12/34	—	—	—	Treatment being continued. Working.	—
18.	24/7/35	24/9/35	2 months	—	Disease still active.	15 months
21.	4/10/35	—	—	—	Still under treatment. Good general condition.	—
22.	5/11/35	23/11/35	Under 1 month	—	Disease still active. General condition fairly good. Working.	13 months
23.	5/5/36	—	—	Hospital	Pneumo-thorax initiated in Broadgreen Sanatorium, 14/8/35. Continuing treatment.	—
24.	31/7/36	—	—	Hospital	Good collapse of lung except at apex. Fluid effusion in pleura. General condition still poor.	—
25.	31/10/36	—	—	—	Pneumo-thorax initiated in Walton Institution, 28/5/36. Good collapse and general condition fairly good. Has now left district.	—
26.	12/11/36	—	—	Hospital	Pneumo-thorax initiated in Walton Institution, July, 1936. Collapse only in lower two-thirds of lung. Pyo-pneumo-thorax present. Aspiration and air replacement being continued.	—

NON-PULMONARY TUBERCULOSIS.

During the year 42 new cases of non-pulmonary tuberculosis were notified, as compared with 43 in 1935 and 70 in 1934, namely:—17 glands, 12 bones and joints, 7 meningitis, 3 abdominal, 1 skin, 1 abscess, and 1 epididymitis; and there were 14 deaths registered. The agreement with the Leasowe Hospital for Children for the maintenance of beds for children suffering from non-pulmonary tuberculosis remained in force, and at the beginning of the year 11 cases were in hospital; 7 cases were admitted, 6 were discharged, and 2 died during the year, and ten were remaining in hospital at end of year.

The scheme for admission to general or special hospitals of cases of non-pulmonary tuberculosis, and for payment by the Council of the charges for maintenance and treatment in cases recommended or approved by the Tuberculosis Officer, was continued; during the year 13 such patients were admitted.

Dental Treatment.—During the year 16 cases received dental treatment.

Public Health (Prevention of Tuberculosis) Regulations, 1925.—No action was taken under the above Regulations relating to tuberculous employees in the milk trade.

Public Health Act, 1925, Section 62.—No action was taken under this Section dealing with the compulsory removal of cases of tuberculosis to hospital.

ARTIFICIAL LIGHT TREATMENT.

The scheme of artificial light treatment by exposure of patients to general irradiation from carbon arc lamps, which was commenced in October 1925, was continued during the year. The staff, plant and working method were as described in previous reports.

The operation time was approximately 314 hours for the carbon arcs and 25 hours for the mercury vapour lamp. The attendances made by patients totalled 2,440, of which 386 were made by patients referred under the Tuberculosis Scheme and 2,054 by patients referred under the Maternity and Child Welfare Scheme.

The attached tabular statement classifies conditions for which treatment was administered and the results obtained in the period under review.

RESULTS OF ARTIFICIAL LIGHT TREATMENT.
(a) TUBERCULOSIS.

	Under Treatment 1st Jan., 1936	New Cases	Discharged			Ceased to attend	Under treatment 31st Dec., 1936
			Much Improved	Im- proved	Station- ary		
Tubercular Cervical Glands... ..	2	9	2	—	1	1	7
Tuberculosis of Bones	1	—	—	—	—	—	1
Lupus	3	—	—	—	2	1	—

(b) MATERNITY AND CHILD WELFARE.

	Under Treatment 1st Jan. 1936	New Cases	Discharged			Ceased to attend	Under treatment 31st Dec. 1936
			Much Improved	Im- proved	Station- ary		
Rickets	28	52	5	24	—	30	21
Debility	6	12	—	4	—	10	4
Malnutrition	16	48	—	9	—	33	22
Totals ...	56	121	7	37	3	75	55

VII. VENEREAL DISEASES.

The Council's scheme for the treatment and control of venereal diseases provides for the maintenance of a treatment centre at the Bootle General Hospital, and for the conduct of pathological examinations at the University of Liverpool. In addition payment is made for services rendered to Bootle residents attending the venereal diseases treatment centres of the Liverpool City Council. At the Council's Bootle Hospital treatment centre four clinics for men and two clinics for women and children are held weekly.

The Annual Statistical Report of the Medical Officer of the Treatment Centre will be found on pages 89 to 91. It shows 349 persons under treatment on 31st December 1936, as against 398 on 1st January 1936, and a decrease in new cases, the figures being 274 as contrasted with 327 in 1935.

The total attendances for treatment made at the Centre during the year show a decrease from 15,057 to 13,124; the figure includes 3,491 attendances made between clinic days for the treatment of gonorrhoea at the irrigation centre. The average attendance at the male clinics was 58.6, and at the female clinics was 12.6. In-patient days totalled 593 as against 487 during the previous year. During 1936 102 cases were discharged on completion of treatment and observation, as contrasted with 137 during 1935.

The Table below is a statement of the number of cases presenting themselves for treatment during the last five years:—

BOOTLE VENEREAL DISEASES CLINIC.

	1932	1933	1934	1935	1936
New Cases (total)	344	325	309	327	274
New Cases (syphilis)	76	58	74	62	50
Total attendances (excluding Irrigation Department)	16876	12256	11616	15057	13124
Irrigation Department attendances	8729	3513	4035	3816	3491
In-patient Days	1154	569	676	487	593
No. discharged after completion of observation and treatment	116	107	136	137	102
No. who ceased to attend after completion of treatment, but before final tests as to cure	170	105	63	78	56

Bootle residents accounted for 52 per cent. of the cases under treatment at the Bootle Hospital Centre, the Authorities contributing the next largest number of cases being the Lancashire County Council with 24 per cent., and Liverpool with 20 per cent.

Against this attendance of outsiders at the Bootle Centre there may be set off the user of Liverpool Centres by Bootle residents, and the following table summarises the available information as to the total number of cases among Bootle residents dealt with at the various local centres for the first time during 1936.

	NEW CASES—BOOTLE RESIDENTS.					
	Syphilis	Soft Chancre	Gonor- rhœa	Other Condi- tions	Total	Total Attend- ances
Seamen's Dispensary ...	3	2	24	16	45	1680
Royal Infirmary ...	5	—	7	5	17	940
Bootle General Hospital	21	1	63	48	133	6836
Mill Road Infirmary ...	10	—	5	6	21	595
Total ...	39	3	99	75	216	10051

The following table sets out the change in incidence of the venereal diseases locally, in so far as it can be measured by records of new cases presenting themselves for treatment at the Bootle Centre:—

	NEW CASES ANNUALLY.					
	SYPHILIS.			GONORRHOEA.		
	Males.	Females	Total.	Males.	Females.	Total.
1921-1925	123	41	164	166	6	172
1926-1930	63	19	82	176	20	196
1931	48	16	64	160	20	180
1932	53	23	76	185	25	210
1933	43	15	58	145	26	171
1934	47	27	74	120	31	151
1935	43	19	62	135	36	171
1936	37	13	50	121	27	148

When the Table is examined it will be noted that there has been a large decrease in the number of new cases of syphilis since 1925, but a smaller decrease in the number of cases of gonorrhœa which present themselves for treatment; it is probable that the figures represent a real fall in the incidence of syphilis.

VIII. MATERNITY AND CHILD WELFARE.

ANTE-NATAL WELFARE.

Home Visiting of Expectant Mothers.—A great deal can be done to promote normal child-birth by careful instruction as to general and personal hygiene, and as to the need for suitable food, open-air exercise and rest, adequate sleep, and properly devised clothing. The usual efforts to improve the general management of pregnancy by such instruction have been continued, and the Health Visitors paid 1,160 home visits to expectant mothers for this purpose during the year.

Ante-Natal Clinics.—The ready use of the facilities provided at the Ante-Natal Clinics in Bootle for medical supervision during pregnancy is well known to the Council, and this position was maintained during 1936. It may be recalled that the first Ante-Natal Clinic was established in Bootle in 1920, in which year expectant mothers equivalent to 8 per cent. of the total number of births came under public medical supervision. During 1936 four Ante-Natal Consultations were held each week, and in all 880 new cases attended, corresponding to 52 per cent. of the total registered births; in addition, 256 cases carried over from the preceding year continued under supervision, and a total of 3,917 attendances was made, with an average of 20 persons per consultation. Further, it should be noted that patients intending to enter Walton Hospital for confinement usually attend the Ante-Natal Clinic held at that institution.

Dental Treatment of Expectant and Nursing Mothers.—Three half-days weekly (two until April 1936) are devoted to the dental treatment of expectant and nursing mothers and the treatment given has been in the nature of extractions and the supply of artificial dentures.

The number of patients treated during the year rose from 258 in 1935 to 326, and the estimated cost of dentures supplied was £166 7s. 0d., of which the patients' contributions were assessed at £52 15s. 6d. Fifty-two cases were carried forward to 1937.

The following statement classifies the work done, including treatment of children under school age.

	Mothers.	Children under school age.
Brought forward	33	—
New cases	326	49
Cases completed	198	49
„ ceasing treatment	109	—
„ carried forward	52	—
Number of attendances	1432	49
„ „ extractions	2240	68
„ „ fillings	—	—
„ „ other operations	—	—
„ „ general anaesthetics	538	14
„ „ artificial dentures supplied	209	—
„ „ treatment sessions	121	—

MATERNAL WELFARE.

Nursing Homes Registration Act, 1927.—There is one Nursing Home proper within the Borough, as well as six Maternity Homes, on the register. Bye-laws governing the conduct of these Nursing Homes were made by the Council in November 1931.

The Practice of Midwives.—The number of midwives resident in Bootle on the local roll is 29, as against 27 in the preceding year; seven others, resident outside the district, have also given notice of their intention to practise in the Borough; all are trained. The above figures do not include midwives practising in local Municipal Maternity Homes.

Regulations of the Central Midwives' Board require medical help to be sought by the midwife in all cases of illness of the patient, or the child, or of any abnormality occurring during pregnancy, labour, or lying-in, and 283 records of sending for medical help were received. Twenty-seven of the calls were on account of abnormalities during pregnancy, 205 during labour, including 74 cases of ruptured perineum, 9 during the puerperal period, and 42 for conditions affecting the child.

The Council accepts responsibility for the payment of midwives' fees in approved necessitous cases, and applications in respect of this service are considered with full information as to the family income and outgoings. The number of applications granted was 111, as compared with 129 during 1935.

Under the 1918 Act the Local Supervising Authority is responsible for the payment of fees to doctors called in by midwives, and last year 215 accounts, totalling £284 6s. 6d., in respect of cases where the doctor himself was unable to recover the fee, were sent in, as compared with 216 accounts, totalling £300 19s. 6d., in 1935. In respect of this sum, the contributions to be recovered from the patients were assessed at £59 9s. 0d.

Milk Assistance Scheme.—The Council's Milk Assistance Scheme, under which dried milk is granted on the Clinie Medical Officer's recommendation, to infants, and to expectant and nursing mothers, in necessitous cases falling within a certain income scale, continued in force. In all, milk to the value of £1,033 13s. 11d., and cod liver oil emulsion to the value of £33 13s. 0d., making a total cost of £1,067 6s. 11d., were granted by the Council to infants and to nursing and expectant mothers, on the advice of the Medical Officer, as compared with £887 10s. 0d. in 1935.

Obstetric Consultations.—In 1926 the Council inaugurated a scheme for the services of a Consultant Obstetric Surgeon to be available to private practitioners in cases of puerperal sepsis, and in 1931 this service was extended to provide for the attendance of the Consultant, at the request of private practitioners, for consultation, at the patient's own home, in respect of conditions arising (a) during pregnancy or puerperium, and (b) at parturition.

During the year consultations were asked for on two occasions during labour, and on two occasions during the puerperium.

Institutional Provision for Maternity Cases.—As is the case elsewhere, an increasing number of mothers choose to go into public institutions for confinement, and last year 516 patients were delivered in Walton Hospital at the cost of the Public Assistance Committee, and 166 patients were delivered in the Municipal Maternity Home; in addition 50 patients were delivered in voluntary hospitals. The total of 732 represents 43 per cent. of the births registered during the year.

Maternity Home.—During the year 1936, 171 patients were admitted to the Maternity Home, the average duration of stay being 13·6 days; admissions in 1935 numbered 174. Four cases were treated for ante-natal supervision, 126 cases were delivered by the nursing staff, and 40 cases were delivered by doctors. Medical assistance was called in by the Matron on three occasions during labour, 20 times for rupture of perineum, thrice during the puerperium, and on three occasions on account of the condition of the infant. Two cases were notified as puerperal pyrexia. There were no cases of ophthalmia neonatorum. All the cases but six left the institution with their babies being breast-fed.

Cases delivered by forceps numbered 13, or 7·8 per cent., as compared with 29·5 per cent. in a recently prepared examination of 14,614 cases delivered in private medical practice.

There were 13 foetal deaths (still-born or dying within 10 days of birth), in 10 of which the child was still-born.

Ninety-eight of the patients were admitted in respect of their first confinement, and there were 32 cases of readmission to the home of former patients, of whom four were admitted for the fourth time, and one for the sixth time. There were three sets of twin births.

Post-Natal Supervision of the Mother.—The medical examination of mothers a few weeks after delivery, locally first instituted in 1929, has been continued and 71 patients attended for such post-natal supervision, as compared with 100 in 1935.

Advice on special or general matters of hygiene was given to all the patients, and simple treatment was prescribed for such commonly occurring conditions as anaemia and constipation. Where examination disclosed conditions requiring further investigation or treatment, the patients were referred to the appropriate agencies, including six references to hospitals, and eleven to the Mothers' Welfare Clinic.

Puerperal Morbidity and Mortality. — Ten cases of puerperal pyrexia and no cases of puerperal fever were notified during the year. No death was registered from puerperal fever, but there were four deaths from other diseases and accidents of pregnancy and parturition; the causes of death were registered respectively as (1) Cerebral Embolism, Thrombosis in pelvic veins following parturition; (2) Shock and Haemorrhage, acute and complete inversion of uterus after delivery; (3) Secondary Anaemia, Pregnancy, Heart Failure, and (4) Eclampsia, Confinement, Pregnancy (live birth, full term).

The circumstances of the confinements were investigated by the Medical Officer of Health, and confidential reports not identifying the patients were sent to the Departmental Committee on Maternal Mortality set up by the Ministry of Health.

The four deaths thus classified to pregnancy and child-birth give a maternal mortality rate of 2·37 per 1,000 (live) births, and the following table shows that although there have been fluctuations in this rate, the local experience has been more favourable than that of the country as a whole.

MATERNAL MORTALITY.
Deaths classed to pregnancy and childbearing.

Period.	BOOTH.		ENGLAND & WALES.
	No. of Deaths	Rate per 1,000 (live) Births.	Rate per 1,000 (live) Births.
1911-1920	66	3·13	4·07
1921-1925	31	3·10	3·90
1926-1930	26	2·73	4·28
1931	7	4·20	4·11
1932	6	3·39	4·21
1933	6	3·63	4·51
1934	7	4·26	4·60
1935	2	1·22	4·00
1936	4	2·37	3·81

MUNICIPAL MIDWIFERY SERVICE.

Midwives Act, 1936.—The main obligation placed upon the Council by the Midwives Act, 1936, is the duty to secure the employment of whole-time midwives for attendance on women in their own homes, in such number as is adequate for the needs of the area. The determination of this number received careful consideration, bearing in mind that the birth-rate locally has been stationary for several years, that the number of institutional confinements is progressively increasing, and that this preference for institutional treatment is likely to be fostered with the erection of the contemplated new maternity hospital; the assessment of the need was further made difficult by the uncertainty as to the number of midwives now in independent practice who would surrender their certificates in return for the compensation prescribed by the Act.

The Council finally decided to appoint, as from 1st July, 1937, eight whole-time midwives from midwives at present practising in the Borough, to inaugurate the service with three midwives resident on the east of Stanley Road and five resident on the west, thus preserving as much freedom of choice of midwife as possible, and proposed to retain close personal relationship between midwife and patient by continuing arrangements for booking without office intervention. Fuller details of the Council's proposals are contained in Appendix 15 on page 93.

INFANT WELFARE.

Notification of Births Acts.—The number of live births notified under these Acts was 1,309; 211 were births to parents who normally resided outside the Borough. 1,295 notifications were received from midwives and 14 from doctors and parents. In addition 589 transfers of live births and 21 of still births to Bootle parents in Liverpool institutions were received. There were 46 still-births notified (including 4 to non-Bootle residents).

The babies were visited shortly after birth by the Infant Welfare Visitors, unless it was considered that suitable advice could be obtained from other sources. A summary of the work of the Infant Welfare Visitors is given on page 92.

Births Registered.—The number of live births registered in the district was 1,318, from which 247 are to be deducted as born in Bootle to residents of other districts, and to which are to be added 617 births to Bootle parents temporarily out of the town; the corrected figure is therefore 1,688. Of the number registered 50 were illegitimate.

Still-births.—The number of still-births registered in the district was returned by the Registrar-General as 47; this figure corrected for 24 inward and 4 outward transfers gives a net total for the year of 67, as compared with 79 for 1935. As full an investigation as possible has been obtained in respect of each such case, and 29 of the foetuses were forwarded for pathological examination.

To obtain a complete picture of the true position as to infant mortality the still-births (which include deaths of infants both before birth and during the act of birth) should be added to the deaths of infants in their first twelve months of independent existence, and the following table is given with that end in view:—

Year.	DEATHS OF INFANTS.					
	Still Births.		Post-Natal.		TOTALS.	
	No.	Rate	No.	Rate	No.	Rate
1926 ...	63	32	187	100	250	129
1927 ...	58	31	141	78	199	106
1928 ...	53	29	186	107	239	133
1929 ...	65	38	138	83	203	118
1930 ...	84	45	141	79	225	120
1931 ...	64	38	159	95	223	134
1932 ...	92	52	152	86	244	138
1933 ...	76	44	146	88	222	132
1934 ...	71	41	126	77	197	118
1935 ...	79	46	150	92	229	138
1936 ...	67	40	115	68	182	108

Infant Deaths.—There were 115 deaths of infants under the age of twelve months, which total expressed as a rate per 1,000 births gives an infant mortality rate of 68, compared with 92 during 1935.

The trend of infant mortality in recent years is set out in the table below:—

Years.	BOOTLE	England and Wales
1901-05	166	138
1906-10	130	117
1911-15	133	110
1916-20	103	91
1921-25	91	76
1926-30	89	68
1931-35	87	62
1936	68	59

The satisfactory fall during the year under review in the infantile mortality rate was a feature mainly of the second and third quarters, the mortality of the first and fourth quarters showing no significant departure from ordinary experience; the quarterly totals of deaths were 40, 26, 16 and 33 respectively, as compared with 37, 34, 32 and 47 in the corresponding quarters of 1935.

The most important of the causes of death, which are given in detail on page 71, were:—prematurity 34, bronchitis and pneumonia 22, convulsions 11, diarrhoea and enteritis 7, meningitis 5, atrophy, debility and marasmus 5, congenital malformation 4, and whooping cough 3. The twenty-two deaths ascribed to bronchitis and pneumonia amongst these causes represent a considerable reduction on the figure of 42 for the previous year.

The rate of infantile mortality among legitimate infants was 67 and among illegitimate infants it was 100. In conformity with the usual experience the mortality rates for males were higher than those for females both during the first four weeks and in the subsequent months.

The infantile mortality rate was uneven throughout the various wards; the approximate rates were:—89 in Linacre, 78 in Knowsley, 65 in Mersey, 61 in Stanley, and 57 in Derby and Orrell respectively.

Infant Mortality in Lancashire County Boroughs.—The Medical Officers of Health of other Lancashire County Boroughs have kindly supplied me with the information enabling me to compile the following list of infant mortality rates per 1,000 births during 1936:—

Town.	Infant Mortality Rate.	Town.	Infant Mortality Rate.
Southport ...	51	Rochdale ...	69
Bury ...	56	Barrow-in-Furness..	74
St. Helens ...	56	Liverpool ...	75
Bolton ...	58	Manchester ...	77
Blackpool ...	63	Wigan ...	82
Blackburn ...	64	Preston ...	83
Burnley ...	64	Salford ...	90
Oldham ...	67	Warrington ...	90
BOOTLE ...	68		

Neo-Natal Mortality.—Fifty-four children died before they were a week old, and a total of 60, or 52·2 per cent. of all the deaths under one year, occurred in children under the age of one month. This is a neo-natal mortality rate of 35·5 per 1,000 births.

DEATH-RATES PER 1,000 BIRTHS, OF INFANTS UNDER FOUR WEEKS.

Years.	BOOTLE.	ENGLAND AND WALES.
	Deaths per 1,000 Births.	Deaths per 1,000 Births.
1906—1910	37·0	40
1911—1915	39·2	39
1916—1920	32·3	37
1921—1925	34·2	33
1926—1930	32·7	32
1931	40·8	31·6
1932	32·8	31·6
1933	34·5	32·2
1934	31·6	31·3
1935	44·6	30·4
1936	35·5	

Public Health (Ophthalmia Neonatorum) Regulations, 1926.—Nine cases of ophthalmia neonatorum were notified during the year compared with 11 in 1935 and 19 in 1934, the rates per 1,000 births being 5·3 for 1936, 6·7 for 1935, and 11·6 for 1934. The disposal of the cases and the results are shown in the table below:—

Cases.			Vision Unim- paired.	Vision Im- paired.	Removed from Area	Still under Treat- ment at end of year.	Total Blind- ness.	Deaths.
Notified.	Treated.							
	At Home.	In Hospital						
9	8	1	9	—	—	—	—	—

Under the Public Health Act, 1925, Sec. 66, conferring powers for the prevention of blindness or for the treatment of persons suffering from disease or injury to the eyes arrangements have been continued with St. Paul's Eye Hospital, Liverpool, for the reception with their mothers, of new-born infants suffering from inflammation of the eyes.

Home Visitation of Infants.—There are seven officers on the health visiting staff, of whom one devotes her time to general clinic supervision and to certain special duties; two give half their time to tuberculosis visiting, and another gives one-quarter of her time to the School Medical Service; the establishment is, therefore, equivalent to $5\frac{1}{2}$ visitors giving their whole time to Maternity and Child Welfare duties. This staff paid 6,520 visits to infants under one year, an average of four to each infant, as compared with 6,451 during 1935.

Infant Welfare Clinics.—There are at present six Infant Consultations held weekly at two Centres. The number of new infants presented for examination and advice at such Centres during the year was 1,534, as compared with 1,387 during 1935, and 1,425 during 1934. Of these, 1,118 were infants under the age of one year, and 416 were over that age. The total attendances throughout the year numbered 21,183, compared with 18,923 during 1935. The average attendance at each meeting varied from 41 at the Wednesday morning session at the School Medical Offices to 82 at the Tuesday afternoon session at the School Medical Offices and 83 at the Wednesday afternoon session at the Health Centre. It is hoped shortly to relieve the pressure on the staff caused by such large attendances by establishing additional consultations.

Education in mothercraft, which is the prime function of the Infant Welfare Clinics, was continued during the year, and included special talks given by the Health Visitors to groups of mothers at the Clinics held at the Health Centre; these talks formed part of a considered syllabus dealing with the principal points in infant hygiene.

YOUNG CHILD WELFARE.

Young Child Mortality.—The Registrar-General showed in his Statistical Review for 1932 that the death-rates of children aged one to five years are more sensitive than those of infants or older children to environmental factors such as are indicated by urbanisation or density of persons per room, and accordingly the following rates have been calculated, the approximate number of children at risk having been estimated by deducting deaths and ignoring migration. The relatively

unfavourable position of Bootle, demonstrated by comparison with corresponding figures for England and Wales for 1934, the latest figures available, is however a substantial improvement on the experience of even fifteen years ago, as the following table shows.

MORTALITY PER 1,000 LIVING IN EACH OF THE FIRST FIVE YEARS OF LIFE.

Year.	Under 1 Year	1—2 Years.	2—3 Years.	3—4 Years.	4—5 Years.	0—5 Years.	1—5 Years.	2—5 Years.
1929	83	42·1	16·3	8·9	1·8	31·0	16·7	8·8
1930	79	24·2	7·4	6·9	3·8	26·3	10·4	6·0
1931	95	22·3	13·7	5·4	5·1	30·3	11·7	8·0
1932	86	30·1	14·4	8·3	6·1	31·6	14·7	9·7
1933	88	26·0	9·7	8·2	8·3	30·6	13·2	8·7
1934	77	19·6	13·5	13·3	2·5	26·3	12·1	9·6
1935	92	20·2	6·8	5·2	5·6	27·8	9·5	5·9
1936	68	19·2	6·7	2·0	3·9	21·5	7·9	4·2
England & Wales 1934	63	12·7	5·9	4·5	3·6	17·5	6·6	4·6

The Registrar-General has further demonstrated that the second year of life usually marks the greatest degree of annual variation in mortality, and is the age of greatest susceptibility to factors affecting the general healthiness of the year. This aspect of the question is illustrated by noting that during the year under review, in the children at age 1-2, the 28 deaths were due to:—

Pneumonia	...	..	...	...	...	...	13
Measles	...	...	...	...	...	...	5
Tuberculosis	...	.	...	...	...	...	3
Diarrhoea	...	...	.	...	...	...	2
Other Diseases	...	..	...	...	...	...	5

whereas during 1935 the 30 deaths in that age group were caused as follows:—

Measles	...	...	...	...	...	...	11
Pneumonia	...	...	...	...	...	..	8
Violence	...	...	...	...	...	...	3
Meningitis	...	...	...	..	...	..	3
Other Diseases	...	...	..	...	...	...	5

Medical Supervision.—The services of the Council's medical officers are available for the promotion of young child welfare in two ways.

Firstly, the continued attendance at infant clinics of infants over the age of twelve months is encouraged, and during the year 2,780 attendances of children aged one, two or three years were made thereat. On receipt of Circular 1550, dated 29th May 1936, from the Ministry of Health, consideration was given to the suggestion there made for the holding of special toddlers' clinics, but the Council decided that the existing demand on the services of its medical staff made it impracticable to adopt the suggestion at the time. With the appointment of an additional medical officer in June 1937, necessitated by these and other new duties to be undertaken at the request of the Ministry of Health, Ministry of Labour, and Board of Education, it will, however, be possible to establish an experimental toddlers' clinic in the near future. Secondly, an examination on the lines of school medical inspection has again been offered to children within three months of their attaining three years of age, and 185 children were so examined.

Supervision by Health Visitors.—During the year the Health Visitors paid 7,768 home visits to children from one to five years, infants in their second year receiving on the average two visits each, and children between two and five years receiving one visit each. The circular of the Ministry of Health above referred to expressed the Ministry's view that the success of any attempt to secure an adequate supervision of the health of young children depended to a large extent on the efficiency of the health visiting staff, and that in many areas it may be necessary to increase that staff. The Council after reviewing the local position decided to appoint an additional health visitor from April 1937, in order to enable greater attention to be paid to this aspect of their work.

Convalescent Home Provision.—Provision was, as usual, made in the Maternity and Child Welfare Sub-Committee's estimates for grants towards the cost of convalescent home treatment for children under the age of five years, and there is little doubt that child health would be much improved by a readier acceptance of the routine of good food, open air, exercise, and rest, practised in the modern convalescent home. The position in this regard showed an improvement during the year, 19 children under five years of age and 119 children over that age receiving convalescent treatment.

Nurse Children.—The new powers in respect of the reception of children under the age of nine years for reward conferred on the Council by the coming into force of the Children and Young Persons Act, 1932,

are administered through the Health Visitors, who supervised the general health and well-being of 10 such children who were on the register on 31st December last.

Boarded-out Children.—At the end of the year one child only was on the Register of Children boarded-out by the Council under Part VI. of the Public Assistance Order, 1930. Four visits to this case were paid by one of the School Nurses during the year.

The Liverpool Child Welfare Association.—This Association has continued to send workers one morning each week to the School Medical Offices to facilitate the arrangements for dealing with recommendations of the medical staff of the Council or private doctors for the provision of surgical appliances, cod liver oil, extra nourishment, or convalescent home treatment, to infants and school children.

IX. HEALTH EDUCATION.

Health Education was continued as in previous years by the Council's medical and nursing staff, the latter undertaking a series of health talks three times weekly to mothers in attendance at the clinics, in supplement of the more informal instruction given in the homes.

Further, publication of a local edition of 2,000 copies of "Better Health" was resumed without cost to the Council monthly in March. Supplementary pages of copy supplied by the staff of the Health Department enabled the following topics to be dealt with during the period of issue:—"The Nervous Child"; "Health of School Child in Bootle in 1935"; "Health of Bootle, 1935"; "Personal Cleanliness and Health"; "Infant Feeding"; "The Common House Fly"; "Cancer"; "The Child before School Age"; "Eyesight and its Preservation"; and "Food—Its Uses and Abuses."

In addition, advantage was taken of the scheme organised by the Central Council for Health Education for the regular supply and display of poster designs from the various national organisations having special interests such as maternity and child welfare, tuberculosis, the milk supply, smoke abatement, and venereal diseases.

X. NURSING ARRANGEMENTS, HOSPITALS AND OTHER INSTITUTIONS AVAILABLE FOR THE DISTRICT.

Professional Nursing in the Home. — The services of the Bootle District Nurses' Association are available for the nursing in their own

homes of patients suffering from puerperal fever, measles, whooping cough, epidemic diarrhoea, ophthalmia neonatorum, pneumonia, and poliomyelitis; information as to cases requiring such attention is mainly derived from the health visiting staff, and the financial arrangements with the Association provide for payment by the Council of an annual retaining fee of £35, together with a charge of 8d. per visit in approved cases. The classification of such work by the District Nurses' Association follows:—

	Carried over from 1935	New Cases	Total	Total Visits	Transferred for treat- ment to Hospital	Died	Im- proved	Under treatment at end of 1936
Discharging cases ...	3	46	49	643	3	—	46	—
Pneumonia ...	1	29	30	524	3	3	24	—
Tuberculosis ...	1	4	5	308	1	1	2	1
Worms ...	—	43	43	299	1	—	42	—
Diarrhoea ...	—	10	10	120	—	1	9	—
Bronchitis ...	—	8	8	115	1	—	7	—
Other diseases ...	—	20	20	241	—	—	20	—
	5	160	165	2250	9	5	150	1

Midwives.—Thirty-six midwives, excluding those practising in local municipal maternity homes, signified their intention to practise within the district during the year commencing 1st January 1936. Apart from the staff of the Municipal Maternity Home, there is no direct employment of or subsidy to practising midwives, although responsibility is accepted for the payment of the midwife's fee in such cases as are sanctioned by the Maternity and Child Welfare Sub-Committee after consideration of the patient's income, size of family, etc.

Hospitals.—The Bootle General Hospital (100 beds) is the only general hospital situate within the Borough boundary, but the Liverpool voluntary hospitals (both general and special) are also attended by Bootle residents.

Other institutional accommodation for the sick is obtained, as explained elsewhere in the Report, by agreement with the Liverpool City Council for reception into their institutions of sick persons, resident in the Borough, for whom other provision is not at the time available.

Clinics and Treatment Centres.—The Clinics and Treatment Centres under the control of the Local Authority remain as described in the Annual Report for 1932.

XI.—HOUSING.

Housing Progress during 1936. — During 1936 one hundred and thirty-nine houses were erected under municipal housing schemes, and two hundred and fourteen were erected by other bodies and persons. The table below demonstrates the progress made with new housing provision during recent years :—

Houses Erected				by Local Authority	by Private Enterprise	by Private Enterprise assisted by Corporation on Corpora- tion land
Number of houses completed during 1920				26	—	—
" " " 1921				76	5	—
" " " 1922				200	—	—
" " " 1923				—	5	—
" " " 1924				2	—	—
" " " 1925				88	3	—
" " " 1926				84	—	—
" " " 1927				182	9	—
" " " 1928				305	—	—
" " " 1929				346	6	—
" " " 1930				348	—	—
" " " 1931				394	—	—
" " " 1932				176	46	11
" " " 1933				79	17	104
" " " 1934				26	44	286
" " " 1935				172	157	206
" " " 1936				139	136	78
Totals				2643	428	685

During the year 34 houses were demolished.

Housing Act, 1935: Housing Needs.—The last Annual Report set out the result of the survey undertaken to ascertain the incidence of overcrowding in the area, and consideration has since been given to the nature and extent of new building required to abate the overcrowding revealed.

In determining the amount of such new building, it would at first sight seem proper that account should be taken of accommodation available in houses which were empty when the survey was taken, and of accommodation at present occupied by overcrowded families which will become available when such families move. Implicit in this view, how-

ever, is the assumption that every house can be utilised to its fullest extent and that the population can be so shuffled as to enable this to be done, although in practice it is found that the empty houses are of such a size and rental as not to be generally available, and the rooms to be vacated by the removal of overcrowded families do not, by reason of lack of necessary amenities, constitute suitable accommodation even for smaller families.

The Council was of opinion that such lack of separate sanitary and washing conveniences and of cooking facilities made it impossible to take into credit as suitable alternative accommodation any vacated rooms in houses of five rooms or less, and accordingly estimated that 500 new houses were required to abate the overcrowding existing at the survey (1,020 families), and the overcrowding which would arise before the end of 1936 through the growth of families in number and age (105 families). This figure of 500 can be considered in relation to a statement which has been made that new houses would generally be required for some 60 per cent. of families recorded as overcrowded—equivalent to a need of 675 in Bootle.

Housing Act, 1935: Overcrowding Provisions.—Consideration was given during the year to the steps to be taken to bring into operation the overcrowding provisions of the Act, depending as they do upon the fixing of an appointed day after which overcrowding constitutes, under certain conditions, an offence. In order to avoid misunderstanding it should perhaps be stated that the offence is not in occupation of a dwelling-house which was overcrowded on the appointed day, but in continued occupation of such a house after the refusal by the occupier of suitable alternative accommodation or after the failure of the occupier to require the removal to suitable alternative accommodation of some person living in the house who is not a member of the occupier's family. The Minister of Health, after consultation with the Council, decided that the appointed day was to be 1st January 1937 in this area as in others where the survey disclosed less than 2 per cent. of over-crowded families in the total number of working-class houses in the district—the percentage in this area, however, being over 5·3 per cent. It was realised that the special difficulties in this area as to non-availability of building sites made it impossible for the authority to provide at an early date suitable alternative accommodation for the overcrowded families, but it was obviously necessary to fix an appointed day not later than that fixed for adjacent authorities in order to prevent this area becoming an "island" in which overcrowding would not be an offence.

The Act requires, in order to facilitate the working of the overcrowding provisions, that all rent books or similar documents relating to working-class houses shall contain a summary showing the permitted number of persons in relation to that house. With the assistance of a temporary staff, satisfactory progress was made in fulfilment of the obligation to notify landlords of such permitted numbers, and in February 1937, there remained unnotified only a small number of principal tenants, who are being given such information in respect of rooms let by them to sub-tenants.

Owing to non-availability of building sites at present the number of new houses built in the Borough during the year has been small, but it may be noted that during the year 64 families recorded as being overcrowded at the time of the survey were granted municipal houses.

Housing Applications in 1937.—New or renewed applications for municipal houses are constantly being received, and the table below classifies the 744 applications now on the register from non-householders resident in the Borough.

HOUSING CIRCUMSTANCES OF APPLICANTS FOR MUNICIPAL HOUSES ON
DECEMBER 31ST 1936.

	Number Living in 1 Room.	Number Living in 2 Rooms.	Number Living in 3 Rooms.	Number Living in 4 Rooms.	Number Living in 5 Rooms.	Totals
Husband & Wife	61	176	10	—	—	247
„ + 1 child	27	149	6	1	1	184
„ + 2 children	25	105	10	1	—	141
„ + 3 „	13	47	5	2	1	68
„ + 4 „	7	21	8	—	1	37
„ + 5 „	2	8	5	1	—	16
„ + 6 „	—	1	3	—	1	5
„ + 7 „	—	1	2	—	1	4
„ + 8 „	1	—	1	—	—	2
Widow or Widower	2	—	—	—	—	2
„ + 1 child	3	10	—	—	—	13
„ + 2 children	—	10	—	—	—	10
„ + 3 „	—	4	2	—	—	6
„ + 4 „	—	2	3	—	—	5
„ + 5 „	—	—	—	—	—	—
„ + 6 „	—	—	—	—	—	—
„ + 7 „	—	—	—	—	—	—
„ + 8 „	—	—	—	—	—	—
Single Persons	2	2	—	—	—	4
Totals	143	536	55	5	5	744

Improvement Areas.—(a) The Howe Street Improvement Area, declared in 1932, contains 36 houses, to which 144 visits of inspection were made during the year.

(b) The Miller's Bridge Improvement Area No. 1, declared in 1934, contains 49 houses, to which 196 visits of inspection were made.

(c) The Miller's Bridge Improvement Area No. 2, declared in 1935, contains 13 houses, and is the third and last of the areas to be dealt with as an improvement area. As recorded in the last report, a considerable amount of work, of both reconstruction and repair, had then been carried out, and early in 1936 the whole of the work necessary to render the houses fit for habitation had been completed; subsequently 39 visits of inspection were made.

In all these areas the Bye Laws, with minor exceptions, have been complied with.

Housing Act, 1930, Sec. 17.—During the year a total of 382 houses was inspected under the above Section, the property being distributed in Wards as follows:—Knowsley Ward 100, Mersey Ward 110, Derby Ward 75, and Linacre Ward 97.

In many cases the work carried out has been of an extensive nature and great improvements have been effected.

In the quinquennial statement prepared in December 1930, in compliance with the Housing Act 1930, it was stated that the estimated number of houses to be repaired under Sec. 17 within the following five years was 1,171; it was subsequently found necessary to include during this period a number of other houses for similar action. The position at the end of March 1937 in respect of the 1,171 houses originally scheduled is, that of this number 1,166 have been repaired, and the remaining 5 houses have been acquired by the Corporation for demolition, as part of a block of 16 houses offered to them for this purpose by the owners as an alternative to the execution of the work required on notices under Sec. 17 of the Housing Act, 1930.

The progress made in regard to action taken under Sec. 17 at the end of December 1936 can be summarised as follows:—

Number of houses inspected	...	...	...	...	2082
„ „ „ in respect of which informal notices were served	...	...	...	...	2082
„ „ „ at which work was completed as a result of informal notices	...	...	...	...	1535
„ „ „ in respect of which Statutory notices were served	...	...	...	...	279
„ „ „ at which work was completed as a result of Statutory notices	...	...	...	...	255
„ „ „ at which work was in progress	...	...	...	...	143
„ „ „ at which work was not commenced	...	...	...	...	125

Pleasant View Clearance Area.—Successive Annual Reports since 1929 have recorded the steps taken to deal with property comprised within the Pleasant View Area, and the position at the end of December 1936 is that the whole of the sixty-nine houses comprising the area have been demolished; of the 78 families displaced, sixty have been accommodated in fifty-eight houses erected on the Marsh Lane site, 9 families in 9 houses erected on the cleared site, and 9 families in 9 houses erected in Bulwer Street.

HOUSING STATISTICS.

I *Inspection of Dwelling-houses during the Year.*

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	...	...	...	...	2512
(b) Number of inspections made for the purpose	...	...	...	...	7840
(2) (a) Number of dwelling-houses (included under subhead (1) above) which were inspected, and recorded under the Housing Consolidated Regulations, 1925	...	...	...	...	382
(b) Number of inspections made for the purpose	...	...	...	...	3717
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	...	...	...	...	—
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	...	...	...	...	2435

II *Remedy of Defects during the year without Service of formal Notices.*

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	1608
---	-----	-----	------

III. Action under Statutory Powers during the Year.

A. Proceedings under sections 17, 18 & 23 of the Housing Act, 1930—	
(1) Number of dwelling-houses in respect of which notices were served requiring repairs	69
(2) Number of dwelling-houses which were rendered fit after service of formal notices—	
(a) by owners	87
(b) by Local Authority in default of owners	—
B. Proceedings under Public Health Acts—	
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	597
(2) Number of dwelling-houses in which the defects were remedied after service of formal notices—	
(a) by owners	581
(b) by Local Authority in default of owners	—

IV. Housing Act; Overcrowding—

(a) (i) Number of dwellings overcrowded at the end of the year	963
(ii) Number of families dwelling therein	963
(iii) Number of persons dwelling therein	5236
(b) Number of new cases of overcrowding reported during the year ...	115
(c) (i) Number of cases of overcrowding relieved during the year ...	172
(ii) Number of persons concerned in such cases	925
(d) Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding	Nil
(e) Any other particulars with respect to overcrowding conditions upon which the Medical Officer of Health may consider it desirable to report	—

XII. BLIND WELFARE.

The duties of the Council under the Blind Persons Act, 1920, are administered in accordance with a revised scheme and regulations which received the approval of the Minister of Health in April 1934.

During the year the Ophthalmic Surgeon held 11 clinics and examined 40 cases; and also examined two cases at home, owing to physical disability which prevented attendance at the clinic. Of this total of 42 examinations 20 were added to the register of blind persons, and there were also seven transfer cases added. Fifteen names were removed, 12 owing to death, and 3 to removal outside the Borough, leaving a total on the register at the end of 1936 of 168 persons as compared with 156 last year.

The age and sex classification of the 168 persons referred to is as follows:—

Age Group.		Males.	Females.	Total
0—5 years	... ..	—	—	—
5—16	„	6	3	9
16—21	„	1	1	2
21—30	„	10	7	17
30—40	„	7	4	11
40—50	„	8	9	17
50—60	„	6	13	19
60—70	„	19	24	43
Over 70 years	... ..	15	35	50
		—	—	—
Totals	... ..	72	96	168
		—	—	—

The number of persons on the register in January 1926 was 81, and comparison of the age classification then and now shows that the increase is almost entirely at ages over 40—thus, the numbers at ages 40-50 were 4 as against 17 in 1936; at years 50-60 they were 8 and 19; at ages 60-70 they were 14 and 43; and over 70 years 21 and 50, respectively.

The registered blind are assisted and supervised by a Home Teacher giving the whole of her time to work in the Borough; during the year the Home Teacher paid 2,245 visits, gave 260 lessons, and disbursed the weekly money payments to necessitous cases. In addition classes were established in the autumn in knitting and weaving for women, and in basket-making for men; the classes are well attended and are much appreciated.

A return furnished by the Home Teaching Society on January 25th 1937 showed that they were then assisting 129 unemployable blind with money grants at a total weekly cost of £90 2s. 3d., the amount of relief being given varying from 2/6 to 25/- weekly, with the maximum amount of 25/- being paid in 13 cases. In addition eleven persons (9 males and 2 females) are employed at the Blind Workshops.

During the year 27 applications for the certification of blindness in order to take advantage of the Wireless Telegraphy (Blind Persons Facilities) Act, 1926, were granted

VITAL STATISTICS OF WHOLE DISTRICT DURING 1936 AND PREVIOUS YEARS.

YEAR.	Population estimated to middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS		NETT DEATHS BELONGING TO THE DISTRICT			
		Un- corrected Number.	Nett.		Number.	Rate.*	of Non- residents registered in the District. 8	of Resi- dents not registered in the District. 9	UNDER ONE YEAR OF AGE		AT ALL AGES.	
			Number. 4	Rate. 5					Number. 10	Rate per 1,000 Nett Births 11	Number. 12	Rate 13
1	2	3	4	5	6	7	8	9	10	11	12	13
1914.	73,230	2,279	2,321	31.7	1,033	14.1	54	263	286	123	1,242	17.0
1915.	Civil 71,617 Total 74,285	2,023	2,050	27.6	1,054	14.7	62	294	292	142	1,286	17.9
1916.	Civil 71,135 Total 77,396	2,047	2,076	26.8	1,101	15.5	80	258	227	109	1,279	18.0
1917.	Civil 68,871 Total 76,772	1,853	1,873	24.4	1,023	14.1	91	281	187	99	1,213	17.6
1918.	Civil 73,500 Total 80,500	1,781	1,810	22.5	1,224	16.6	63	268	210	116	1,429	19.4
1919.	Civil 77,000 Total 80,500	1,860	1,914	23.9	988	12.7	79	245	184	96	1,154	15.0
1920.	80,029	2,285	2,289	28.6	1,000	12.5	59	195	223	97	1,136	14.2
1921.	76,487	2,142	2,068	27.0	817	10.7	43	236	198	96	1,010	13.2
1922.	76,518	2,144	2,051	26.8	877	11.5	42	258	164	80	1,093	14.3
1923.	76,549	2,159	1,999	26.1	858	11.2	50	262	170	85	1,070	14.0
1924.	76,581	2,078	1,942	25.4	799	10.4	59	226	192	99	966	12.6
1925.	76,612	2,077	1,943	25.4	820	10.7	53	324	188	97	1,091	14.2
1926.	76,643	1,958	1,865	24.3	730	9.5	36	311	187	100	1,005	13.1
1927.	76,674	1,916	1,817	23.7	734	9.6	39	339	141	78	1,034	13.5
1928.	76,705	1,793	1,746	22.8	703	9.2	48	379	186	107	1,033	13.5
1929.	76,737	1,668	1,660	21.6	713	9.3	34	414	138	83	1,093	14.2
1930.	76,768	1,774	1,793	23.4	608	7.9	61	394	141	79	941	12.3
1931.	77,160	1,709	1,667	21.6	731	9.5	55	464	159	95	1,140	14.8
1932.	77,260	1,711	1,768	22.9	638	8.3	48	437	152	86	1,027	13.3
1933.	77,210	1,532	1,652	21.4	648	8.4	56	483	146	88	1,075	13.9
1934.	76,800	1,541	1,644	21.4	587	7.6	45	448	126	77	990	12.9
1935.	76,500	1,491	1,636	21.4	568	7.4	46	458	150	92	980	12.8
1936.	76,010	1,318	1,688	22.2	579	7.6	51	509	115	68	1,037	13.6

* These rates are based on the uncorrected numbers.
Area of District in acres (exclusive of river bed)—1,946.5.

APPENDIX 2.

CASES OF INFECTIOUS DISEASES NOTIFIED DURING THE YEAR 1936.

NOTIFIABLE DISEASES.	NUMBER OF CASES NOTIFIED.											Total Cases Notified in each Locality (e.g., Parish or Ward) of the District.							
	At all Ages.	At Ages—Years.										Derby Ward.	Stanley Ward.	Mersey Ward.	Knowsley Ward.	Linacre Ward.	Orrell Ward.		
		Under One year	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-35	35-45							45-65	Over 65 yrs.
Smallpox .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera-Plague .. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Mem- branous)(Croup) .. .	129	4	8	12	10	47	20	9	13	1	1	1	16	10	23	23	27	30	11
Erysipelas	51	..	1	..	..	5	2	4	10	7	17	5	9	2	8	8	13	11	67
Scarlet Fever	190	2	11	9	19	105	24	8	6	1	..	..	44	13	21	23	22	67	..
Typhus Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	8	..	..	1	..	2	1	1	2	1	..	..	1	1	1	1	2	2	..
Relapsing Fever .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Pyrexia ..	10	..	..	..	..	..	..	..	8	2	..	..	2	2	..	..	3	1	..
Cerebro-spinal Meningitis ..	9	3	1	..	..	2	2	..	1	..	..	..	1	1	1	2	2	2	..
Poliomyelitis	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..
Ophthalmia Neonatorum ..	9	9	..	..	..	..	..	..	..	..	..	..	1	3	7	3	2	3	..
* Infantile Diarrhoea .. .	11	7	..	1	1	3	..	..	2	4	5	1	2	1	1	1	5	7	..
Influenza Pneumonia .. .	17	..	..	1	1	3	..	..	2	4	5	1	2	1	1	1	5	7	..
Acute Primary Pneumonia ..	129	12	8	11	4	23	7	5	11	13	14	5	26	13	14	27	17	32	..
Trench Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malaria	2	..	..	..	..	..	..	1	1	..	..	..	1	..	1	..	..	..	..
Encephalitis Lethargica ..	1	..	..	..	..	..	..	..	1	1	..	..	..	..	1	..	..	..	..
Dysentery .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	567	37	29	35	34	187	56	28	55	29	37	11	103	46	78	90	93	157	..

* Voluntary notification of cases under the age of two years during July, August and September.

Isolation Hospital or Hospitals, Sanatoria, etc. :—Corporation Hospital, Linacre Lane, Bootle; Bootle Sanatorium, Maghull.

CAUSES OF DEATH.	NETT DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT.										TOTAL DEATHS WHETHER OF "RESIDENTS" OR "NON-RESIDENTS IN INSTITUTIONS IN THE DISTRICT
	All ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 & under 25 years.	25 & under 45 years.	45 & under 65 years.	65 and upward.		
All causes { Certified	990	108	27	19	31	54	126	257	368	127	
{ Uncertified	47	7	1	..	1	..	6	15	17	12	
Enteric Fever	1	1	1	
Small-pox	
Measles	8	1	5	2	2	
Scarlet Fever	2	1	1	2	
Whooping Cough	7	5	1	2	1	
Diphtheria and Croup	8	1	..	3	3	..	1	8	
Influenza	11	..	1	1	2	3	4	..	
Erysipelas	7	1	..	3	2	1	1	
Phthisis (Pulmonary Tuberculosis)	88	..	1	27	26	26	8	14	
Tuberculous Meningitis	5	..	1	1	1	1	1	1	
Other Tuberculous Diseases	9	..	1	3	2	2	1	1	
Cancer, malignant disease	124	1	..	3	7	61	52	9	
Rheumatic Fever	6	1	3	1	..	1	..	
Meningitis	14	5	1	1	3	..	4	2	
Organic Heart Disease	141	1	3	9	32	96	7	
Bronchitis	53	2	7	10	34	3	
Pneumonia (all forms)	157	20	13	4	5	1	16	46	52	16	
Other diseases of respiratory organs	16	3	7	6	2	
Diarrhœa and Enteritis	13	7	2	..	2	2	..	1	
Appendicitis and Typhlitis	4	1	1	2	..	
Cirrhosis of Liver	
Alcoholism	
Nephritis and Bright's Disease	29	1	1	4	3	20	4	
Puerperal Fever	1	
Other accidents and diseases of Preg- nancy and Parturition... .. .	4	1	3	1	
Congenital Debility and Malformation, including Premature Birth	43	43	6	
Violent Deaths, excluding Suicide	26	1	..	2	3	5	6	6	3	20	
Suicide	4	3	1	..	2	
Other Defined Diseases	247	31	2	3	8	5	33	63	102	32	
Diseases ill-defined or unknown... .. .	10	7	3	3	
Totals	1037	115	28	19	32	54	132	272	385	139	

[illegible]

INFANT MORTALITY.

1936. Net Deaths from stated causes at various Ages under One Year of Age.

CAUSES OF DEATH.																											
All Causes	(Certified Uncertified)		Under 1 week.		1-2 weeks.		2-3 weeks.		3-4 weeks.		Total under 4 weeks.		4 weeks and under 3 months.		3 months and under 6 months.		6 months and under 9 months.		9 months and under 12 months.		Total Deaths under One Year.						
	52	1	4	1	58	14	11	15	10	108	7														
Small-pox					
Chicken-pox					
Measles					
Scarlet Fever					
Whooping Cough					
Diphtheria and Croup					
Erysipelas					
Tuberculous Meningitis					
Abdominal Tuberculosis					
Other Tuberculous Diseases					
Meningitis (<i>not Tuberculous</i>)					
Convulsions					
Laryngitis					
Bronchitis					
Pneumonia (all forms)					
Diarrhoea					
Enteritis					
Gastritis					
Syphilis					
Rickets					
Suffocation, overlying					
Injury at Birth					
Atelectasis					
Congenital Malformations					
Premature Birth					
Atrophy, Debility and Marasmus					
Other Causes					
Totals	54	1	4	1	60	18	12	15	10	115	7														
Net Births in the year { legitimate infants ... 1,638														Net Deaths in the year { legitimate ... 109													
Net Births in the year { illegitimate infants ... 50														Net Deaths in the year { illegitimate ... 6													

APPENDIX 5.

Memo. 87/T. (Revised).
FIRST SCHEDULE.

Form T. 145.

TREATMENT OF TUBERCULOSIS.
RETURN FOR THE YEAR 1936.

(A) Return showing the work of the Dispensary (or Dispensaries).

DIAGNOSIS.	PULMONARY.				NON-PULMONARY.				TOTAL.				GRAND TOTAL.	
	Adults		Children		Adults		Children		Adults		Children			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
A.—NEW CASES examined during the year (excluding contacts):—														
(a) Definitely tuberculous .	42	29	4	2	4	5	4	7	46	34	8	9		97
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	7	12	6	8		33
(c) Non-tuberculous	—	—	—	—	—	—	—	—	31	37	18	21		107
B.—CONTACTS examined during the year:—														
(a) Definitely tuberculous .	—	—	—	—	—	—	—	—	—	—	—	—		—
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	—	5	1	—		6
(c) Non-tuberculous	—	—	—	—	—	—	—	—	17	43	36	31		127
C.—CASES written off the Dispensary Register as:—														
(a) Recovered	1	3	2	—	1	—	14	16	2	3	16	16		37
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous)	—	—	—	—	—	—	—	—	55	91	63	63		272
D.—NUMBER OF CASES on Dispensary Register on December 31st:—														
(a) Definitely tuberculous .	229	135	11	21	22	35	44	55	251	170	55	76		552
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	6	12	7	6		31

1. Number of cases on Dispensary Register on January 1st	637	7. Number of consultations with medical practitioners:—	
		(a) Personal	9
		(b) Other	227
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years	19	8. Number of visits by Tuberculosis Officers to homes (including personal consultations)	19
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of"	71	9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes	2027
4. Cases written off during the year as Dead (all causes)	63	10. Number of:—	
		(a) Specimens of sputum, etc., examined	522
		(b) X-ray examinations made in connection with Dispensary work	567
5. Number of attendances at the Dispensary (including Contacts)	6127	11. Number of "Recovered" cases restored to Dispensary Register, and included in A (a) and A (b) above	4
6. Number of Insured Persons under Domiciliary Treatment on the 31st December	148	12. Number of "T.B. plus" cases on Dispensary Register on December 31st	224

(B) Number of Dispensaries for the treatment of Tuberculosis (excluding centres used only for special forms of treatment).

Provided by the Council ... One Provided by Voluntary Bodies ... Nil

APPENDIX 5 (continued).

(C) Number of beds available for the treatment of Tuberculosis on the 31st December in Institutions belonging to the Council.

Name of Institution	For Pulmonary Cases		For Non-Pulmonary Cases		Total
	Adults	Children under 15	Adults	Children under 15	
Linacre Hospital	28	..	...	..	28
Maghull Sanatorium	22	...	...	...	22

(D) Return showing the extent of Residential Treatment and Observation during the year in Institutions (other than Poor Law Institutions) approved for the treatment of Tuberculosis

		In Institutions on Jan. 1st	Admitted during the year.	Discharged during the year.	Died in the Institutions.	In Institutions on Dec. 31st
Number of doubtfully tuberculous cases admitted for observation	Adult males	—	3	2	—	1
	Adult females	1	2	1	—	2
	Children	1	—	1	—	—
	Total	2	5	4	—	3
Number of patients suffering from pulmonary tuberculosis.	Adult males	22	58	50	8	22
	Adult females	10	34	34	6	4
	Children	3	6	3	—	6
	Total	35	98	87	14	32
Number of patients suffering from non-pulmonary tuberculosis.	Adult males	1	8	9	—	—
	Adult females	2	7	4	2	3
	Children	10	5	6	1	8
	Total	13	20	19	3	11
GRAND TOTAL		50	123	110	17	46

APPENDIX 5 (continued).

(E) Return showing the extent of Residential Treatment provided during the year in Poor Law Institutions for persons chargeable to the Council.

		In Insti- tutions on Jan. 1.	Admit- ted dur- ing the year	Dis- charged during the year	Died in the Institu- tions.	In Institu- tions on Dec. 31.
Number of patients suffering from pulmonary tuberculosis.	Adult males	6	64	42	21	7
	Adult females	2	20	17	1	4
	Children	2	4	1	1	4
	Total	10	88	60	23	15
Number of patients suffering from non-pul- monary tuberculosis.	Adult males	5	9	12	1	1
	Adult females	4	5	8	1	—
	Children	5	15	9	4	7
	Total	14	29	29	6	8
GRAND TOTAL		24	117	89	29	23

(F) Return showing the results of observation of doubtfully tuberculous cases discharged during the year from Institutions approved for the treatment of Tuberculosis.

Diagnosis on discharge from observation	For Pulmonary Tuberculosis						For Non-Pulmonary Tuberculosis						Totals		
	Stay under 4 weeks			Stay over 4 weeks			Stay under 4 weeks			Stay over 4 weeks					
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.
Tuberculous...
Non-Tuberculous	8	...	...	...	...	...	...	...	...	3	...	...
Doubtful	1	...	...	...	...	...	...	...	...	1	...
Totals	3	1	...	...	...	...	...	...	...	3	1	...

(G) Return showing the immediate results of treatment of definitely tuberculous patients discharged during the year from Institutions approved for the treatment of Tuberculosis.

Classification on admission to the Institution.	Condition at time of Discharge.	Duration of Residential Treatment in the Institution												Grand Totals.							
		Under 3 months (but over 28 days)			3-6 months.			6-12 months.			More than 12 months.				Totals.						
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.		M.	F.	Ch.				
PULMONARY TUBERCULOSIS.	Class T.B. minus.	Quiescent	...	...	...	1	—	—	1	2	—	—	—	1	—	—	2	2	1	5
		Not Quiescent	...	...	...	8	1	—	1	—	—	1	—	—	—	—	10	1	—	11
		Died in Institution	...	...	...	1	—	—	—	—	—	—	—	—	—	—	1	—	—	1
	Class T.B. + Group 1.	Quiescent	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	1
		Not Quiescent	...	...	...	2	4	—	1	1	—	1	2	—	1	—	4	8	—	12
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Class T.B. + Group 2.	Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Not Quiescent	...	...	...	2	8	—	5	4	—	6	2	—	1	2	14	16	1	31
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Class T.B. + Group 3.	Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Not Quiescent	...	...	...	7	2	—	4	3	—	2	—	—	1	—	14	5	—	19
		Died in Institution	...	...	...	1	2	—	1	1	—	—	—	—	—	—	2	3	—	5
Totals (Pulmonary)		...	22	17	—	13	11	1	10	4	1	2	3	1	47	35	3	85			

APPENDIX 5 (continued).

Classification on admission to the Insti- tution.	Condition at time of Discharge.	Duration of Residential Treatment in the Institution.												Grand Totals.			
		Under 3 months (but over 28 days)			3-6 months.			6-12 months.			More than 12 months.				Totals.		
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.		M.	F.	Ch.
Bones & Joints.	Quiescent ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Not Quiescent ...	4	3	1	—	—	1	—	—	—	—	—	1	4	3	3	10
	Died in Institution ...	—	—	1	—	—	—	—	—	1	—	—	—	—	1	1	2
Abdominal.	Quiescent ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Not Quiescent ...	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—	1
	Died in Institution ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Organs.	Quiescent ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Not Quiescent ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Died in Institution ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Peripheral Glands.	Quiescent ...	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	1
	Not Quiescent ...	1	—	—	—	—	—	—	—	1	—	—	—	1	—	1	2
	Died in Institution ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals (Non-Pulmonary) ...		5	4	2	—	—	1	1	—	2	—	—	1	5	5	6	16

Non-PULMONARY TUBERCULOSIS.

NON-PULMONARY TUBERCULOSIS.

TUBERCULOSIS SCHEME.—

Supplementary Annual Return showing in summary form (a) the condition and (b) the reasons for the removal of all cases written off the Register.

first entered on the Dispensary Register as definite cases of

[illegible]

PULMONARY TUBERCULOSIS.

at the end of 1936 of all patients remaining on the Dispensary Register; The Table is arranged according to the years in which the patients were pulmonary tuberculosis, and their classification at that time.

Class T.B. minus	1931.					1932.					1933.					1934.					1935.					1936.				
	Class T.B. plus				Total (Class T.B. plus)	Class T.B. plus				Total (Class T.B. plus)	Class T.B. plus				Total (Class T.B. plus)	Class T.B. plus				Total (Class T.B. plus)	Class T.B. plus				Total (Class T.B. plus)	Class T.B. plus				Total (Class T.B. plus)
	Group 1.	Group 2.	Group 3.			Group 1.	Group 2.	Group 3.			Group 1.	Group 2.	Group 3.			Group 1.	Group 2.	Group 3.			Group 1.	Group 2.	Group 3.			Group 1.	Group 2.	Group 3.		
-	-	2	-	-	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	1	2	-	3	2	-	6	-	6	3	1	8	3	12	6	2	9	5	16	6	4	17	11	32	23	2	12	6	20	-
3	-	2	-	2	4	-	3	1	4	6	7	1	-	8	6	3	11	-	14	8	4	8	3	15	13	2	5	2	9	-
-	-	-	-	-	-	3	1	-	1	-	1	1	1	3	-	-	1	-	1	3	2	-	-	2	4	-	1	1	2	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	1	-	-	-	-	1	1	3	-	4	7	1	2	1	4	-	-	1	-	1	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	1	6	-	7	11	1	9	1	11	13	10	13	4	27	21	6	23	6	35	17	10	26	14	50	40	4	18	9	31	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	4	7	4	15	10	2	9	3	14	9	3	8	3	14	6	2	9	1	12	3	-	3	3	6	4	-	2	-	2	-
9	2	10	16	28	4	-	8	8	16	7	-	5	13	18	3	-	12	13	25	2	1	6	12	19	2	-	-	4	4	-
5	-	7	6	13	7	-	4	13	17	4	-	6	5	11	7	-	7	4	11	-	-	5	9	14	1	1	-	5	6	-
4	-	-	2	2	-	-	1	-	1	1	-	1	-	1	-	1	-	1	2	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	6	24	28	58	21	2	22	24	48	21	3	20	21	44	16	3	28	19	50	5	1	14	24	39	7	1	2	9	12	-
60	7	30	28	65	32	3	31	25	59	34	13	33	25	71	37	9	51	25	85	22	11	40	38	89	47	5	20	18	43	-

NON-PULMONARY TUBERCULOSIS.

at the end of 1936 of all patients remaining on the Dispensary Register; and all cases written off the Register.

1931.					1932.					1933.					1934.					1935.					1936.				
Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.
-	1	-	-	1	1	-	-	-	1	2	1	-	-	3	-	-	-	1	1	-	-	-	-	-	-	-	-	1	1
1	-	1	1	3	-	1	-	1	2	1	-	-	-	1	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-
-	-	1	-	1	3	-	-	5	8	5	1	1	8	15	1	1	-	15	17	1	1	-	9	11	-	-	-	4	4
-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	3	-	-	-	3	2	-	1	-	3	2	-	1	-	3
-	-	-	-	-	-	-	1	1	2	1	1	-	1	3	2	-	1	1	4	1	3	-	1	5	2	-	1	2	5
1	-	-	-	1	2	-	-	-	2	2	-	-	1	3	4	1	-	3	8	1	-	-	2	3	2	-	-	9	11
-	-	-	-	-	-	-	-	-	-	1	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	1	2	1	6	6	1	1	7	15	12	3	2	11	28	10	2	1	22	35	5	4	1	12	22	6	-	2	16	24
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	5	-	12	19	1	1	-	6	8	-	1	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	3	2	7	15	2	-	-	4	6	2	1	-	11	14	1	-	-	3	4	1	-	-	-	1	-	-	-	1	1
1	-	-	-	1	3	-	-	-	3	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	1	1	1	-	3	-	1	1	-	2	-	-	1	-	1	-	-	-	-	-	1	1	-	-	2
1	1	-	2	4	3	-	-	1	4	-	-	-	-	-	1	1	1	-	3	-	-	-	-	-	-	-	-	-	-
8	9	2	22	41	10	2	1	11	24	3	3	1	15	22	2	1	2	3	8	1	-	-	-	1	1	1	-	1	3
10	10	4	23	47	16	3	2	18	39	15	6	3	26	50	12	3	3	25	43	6	4	1	12	23	7	1	2	17	27

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1930.

PART I.—Summary of Notifications during the period from the 1st January 1936, to the 31st December 1936, in the area of the County Borough of Bootle.

Formal Notifications													
AGE-PERIODS	Number of Primary Notifications of new cases of Tuberculosis.											Total (all ages)	Total Notifications
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards		
Pulmonary, Males ...	...	...	2	3	6	8	12	17	15	6	4	73	88
“ Females ...	...	3	1	1	9	17	8	5	10	4	2	57	68
Non-pulmonary, Males ...	...	2	2	1	5	1	...	2	...	...	...	13	16
“ Females ...	1	2	3	2	2	3	3	2	...	...	1	19	22

SUPPLEMENTAL RETURN.

PART II.—New cases of Tuberculosis coming to the knowledge of the Medical Officer of Health during the above-mentioned period, otherwise than by formal notification.

AGE PERIODS	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards	Total Cases
Pulmonary Males ...	1	1	1	...	...	4	4	5	2	3	...	21
" Females ...	...	...	1	...	1	3	5	...	1	1	3	15
Non-pulmonary Males ...	...	...	1	1	...	...	...	...	...	2	...	4
" Females ...	1	4	...	...	...	1	...	...	...	...	...	6

APPENDIX 7 (continued).

The source or sources from which information as to the above-mentioned cases was obtained is stated below:—

SOURCE OF INFORMATION.	No. of Cases.	
	Pulmonary.	Non-Pulmonary.
Death Returns—From Local Registrars ...	9	2
" " Transferable Deaths from Registrar-General...	...	1
Posthumous notifications ...	4	3
"Transfers" from other areas (other than transferable deaths)	23	4
Other sources, if any. . . . .	...	...

PART III. NOTIFICATION REGISTER.

	Pulmonary.		Non-Pulmonary.		Total Cases
	Males	Females	Males	Females	
Number of cases of Tuberculosis remaining at the 31st December 1936, on the Registers of Notifications kept by the Medical Officer of Health of the County Borough ...	313	255	115	147	830
Number of cases removed from the Registers during the year by reason <i>inter alia</i> of—					
1. Withdrawal of notification ...	...	...	...	...	...
2. Recovery from the disease ...	3	3	1	16	37
3. Death ...	58	33	9	8	108

APPENDIX 8.

SUMMARY OF WORK DONE BY SANITARY INSPECTORS.

NUISANCES—

No. of complaints	1540
No. of complaints confirmed	1463
No. of nuisances discovered on above complaints	3286
No. of nuisances discovered excluding on complaint	1066
No. of re-inspections of nuisances	11547
No. of special visits and miscellaneous visits	966
No. of informal notices served	1946
No. of statutory notices served	666
Matters referred to the Borough Engineer	310
Matters referred to the Water Engineer, Liverpool	41
Matters referred to the Housing Manager	63

Notices to Owners—

Accumulations	56
Choked and defective drains	345
Choked and defective downspouts and raingutters	401
Defective roofs	572
Defective yard surfaces	292
Defective water pipes	69
Defective water closets	895
Defective Ashbins	360
Miscellaneous	2012

Notices served on occupiers of houses—

Dirty conditions	6
Removal of fowl and other animals	4
Accumulations	7
Miscellaneous	3

Notices served on occupiers of food premises—

Offensive accumulations	1
Dirty condition of premises or fittings	7
Defective floors	1
Unsuitable storage	—

PLACES OF PUBLIC ENTERTAINMENT—

There are 6 buildings used for public entertainment in the town. There were 50 visits of inspection.

HOUSING ACTS—

Howe Street Improvement Area—Re-inspections	144
Miller's Bridge Improvement Area No. 1—Re-inspections	196
Miller's Bridge Improvement Area No. 2 ,,	39
Housing Act, 1930, Section 17—	
Number of houses inspected	382
Informal notices served	382
Informal notices complied with	230
Number of houses where work is in progress at end of year	170
Statutory notices served	69
Statutory notices complied with	108
Number of inspections and re-inspections made	5321

COMMON LODGING HOUSES—

No. registered under the Public Health Act, 1875	...	...	...	...	4
No. of inspections	...	...	...	...	200
No. of informations laid in respect of infringements	...	...	...	...	—

CANAL BOATS—

No. of inspections and re-inspections of canal boats	...	...	...	...	70
„ infringements re certificates	...	...	...	...	—
„ infringements re cleanliness	...	...	...	...	3
„ infringements re ventilation	...	...	...	...	1
„ other defects	...	...	...	...	1
„ notices sent in respect of same	...	...	...	...	—
„ defects or infringements where necessary work was done without service of notice	...	...	...	...	6

STEPS TAKEN TO PREVENT NUISANCE FROM SMOKE—

No. of observations made	...	...	...	...	...	...	...	54
„ intimations sent	...	...	...	...	...	...	...	10
„ notices served in respect of excessive black smoke	...	...	...	...	...	...	...	1
„ informations laid	...	...	...	...	...	...	...	—
Amount of fines and costs	...	...	...	...	...	...	...	—

DAIRIES, COWSHEDS, AND MILKSHOPS—

No. of cowkeepers and dairymen resident in the borough on register	...	18
„ milk purveyors (not cowkeepers) resident in the borough on register	...	84
„ milk purveyors resident outside the borough on register	...	26
„ premises registered as cowsheds or dairies or milkshops	...	71
„ inspections made—cowsheds 209, dairies and milkshops 362	...	571

PIGGERIES—

No. of premises	...	...	...	...	...	...	...	...	4
„ visits	...	...	...	...	...	...	...	...	170

STABLES—

No. of visits	22
---------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	----

RATS AND MICE (DESTRUCTION) ACT—

No. of visits re infestation	130
------------------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

FOOD INSPECTION—

No. of visits to butchers' shops	...	...	...	...	...	...	...	...	609
„ „ fishmongers' shops	...	...	...	...	...	...	...	...	49
„ „ fried fish shops	...	...	...	...	...	...	...	...	86
„ „ dining rooms and kitchens	...	...	...	...	...	...	...	...	77
„ „ grocers' shops	...	...	...	...	...	...	...	...	73
„ „ fruiterers' shops	...	...	...	...	...	...	...	...	55
„ „ cold stores	...	...	...	...	...	...	...	...	27
„ „ ice cream premises	...	...	...	...	...	...	...	...	86
„ „ respecting observation of Merchandise Marks Acts	...	...	...	...	...	...	...	...	334

SUMMARY OF LEGAL PROCEEDINGS—

Public Health Act, Section 91	...	...	...	...	...	...	...	9
Food and Drugs (Adulteration) Act, 1928, Sec. 2	...	...	...	...	...	...	...	1
Article 30 of the Milk and Dairies Order, 1926, and the Milk and Dairies (Consolidation) Act, 1915	...	...	...	...	...	...	...	1

DISINFECTION : INFECTIOUS DISEASES—

No. of houses disinfected after notifiable infectious diseases	292
" " " pulmonary tuberculosis	199
" " " other diseases	15
" " cleaned in default of, or at request of, owners	6

All houses assessed at £15 per annum or less are cleaned after infectious diseases (i.e., the walls stripped and the ceilings whitened) by the Corporation at their own cost; in cases of pulmonary tuberculosis the Corporation strip, when necessary, whatever the rent.

LIST OF ARTICLES DISINFECTED—

Paillasses	119
Mattresses	2
Beds	239
Bolsters and Pillows	877
Blankets	716
Quilts	464
Sheets	448
Carpets	7
Hearthrugs	27
Wearing Apparel	1355
Miscellaneous Articles	239
	<hr/>
	4493

The figures in the table do not include the ambulance bedding (one bed, one pillow and three blankets), which is disinfected after the removal of each case.

One hundred and nine books were disinfected.

One hundred and forty seven articles were destroyed at the request of the owners.

BUG INFESTATION—

Number of houses fumigated (Corporation 111, Private 52)	163
Number of vanloads of furniture treated with hydrogen-cyanide	321

FACTORY AND WORKSHOP ACT.

WORKSHOPS AND WORKPLACES (excluding Bakehouses)—

No. on register	86
No. of visits and re-visits	266
" workrooms with dirty walls or ceilings	2
" miscellaneous defects found	9
" notices issued to occupiers	14
" notices issued to owners	1
" notices complied with	22
" references to the Factory Inspector	—
" " " Borough Engineer	—

FACORIES—

No. of visits and re-visits	205
No. with insufficient or unsuitable sanitary accommodation	7
No. of insufficient drainage of floors	1
" defective drains and water closets	—
" cases of uncleanness	5
" miscellaneous defects found	—
" defects remedied	13
" written notices	6

BAKEHOUSES—

No. on register	... ..	18
No. of visits and re-visits	... ..	59
,, bakehouses found dirty (walls, ceilings and floors)	... ..	3
,, notices issued for limewashing	... ..	3
,, notices issued for miscellaneous defects	... ..	—
,, bakehouses taken off the register during the year	... ..	—
,, bakehouses added to the register during the year	... ..	—

CONFECTIONERY BAKEHOUSES—

No. on register at end of year	22
No. taken off register during the year	—
No. added to register during the year	—
No. of visits and re-visits	54
No. found dirty (walls, ceilings and floors)	—
No. of notices issued for limewashing	2
„ „ „ miscellaneous defects	—

OUTWORKERS—

No. of outworkers on register at end of year	3
„ visits and re-visits made to houses of out-workers	36
„ notices served for sanitary defects at houses of out-workers	—
Outworkers employed in Bootle for Liverpool firms engaged in—	
Hosiery	1
Outworker employed in Litherland for Bootle firm:—	
Hosiery	1

APPENDIX 9.

FOOD AND DRUGS (ADULTERATION) ACT, 1928.

SAMPLES TAKEN DURING THE YEAR 1936.

Nature of Article	Total.	Number of Samples taken for Analysis.		Number found Adulterated.	
		Informal	Formal	Informal	Formal
Milk	125	114	11	7	2
Skimmed and Separated Milks ...	4	1	3	...	...
Condensed Milk	15	15	...	2	...
Cream and Tinned Cream ...	4	3	1	..	..
Butter	28	28	...	...	...
Margarine	16	16	...	...	...
Tea	4	4	...	...	...
Cheese and Wrapped Cheese ...	5	5	..	..	...
Coffee and Mixtures	3	3	...	...	...
Rice	6	6	...	...	...
Cocoa	4	4	...	...	...
Confectionery	5	5	...	...	...
Sausage	5	5	..	2	...
Lard	6	6	...	...	..
Flour	1	1	...	...	...
Drinking Oil	1	1	...	..	...
Olive Oil	3	3	...	..	...
Pepper	3	3	...	...	...
Cooking Fat	2	2	...	...	..
Tapioca	1	1	...	...	..
Aspirin Tablets	1	1	...	...	...
Self-Raising Flour	3	3	...	...	...
Borax	2	2	...	...	...
Dried Fruit	1	1	...	...	...
Bicarbonate of Soda	2	2	...	...	...
Blackcurrant Wine	1	1	...	...	...
Bottled Plums	1	1	...	...	..
Yeast Tablets	1	1	...	..	...
Jam	1	1	...	...	...
Ground Ginger	1	1	...	...	...
Ground Rice	1	1	...	...	...
Ground Cinnamon	1	1	...	..	...
Cream Buns	1	1	...	...	...
Essence of Almonds	1	1	...	...	...
Essence of Vanilla	1	1	...	...	...
Syrup	1	1	...	...	...
Table Cream	1	1	...	...	...
Corn Flour	1	1	...	...	...
Tinned Sild	5	5	..	...	...
Dripping	2	2	...	...	...
Baking Powder	2	2	...	...	...
Vinegar	1	1	...	...	...
Tinned Brisling	1	1	...	...	...
Tinned Crab	1	1	...	...	..
Tinned Fillets of Kipperd Herrings	1	1	...	...	...
Tinned Peas	1	1	...	...	...
Tinned Sardines	2	2	...	...	..
Tinned Tomatoes	1	1	...	...	...
Tinned Fruit Cocktail	1	1	...	...	...
Tinned Herrings	1	1	...	...	...
Tinned Fruit Salad in Jelly ...	1	1	...	...	...
Tinned Lobster	1	1	...	...	...
Tinned Steak and Kidney Pie ...	1	1	...	..	..
Composition Flavouring Essence.	1	1	...	...	...
Fruit Sauce	1	1	...	...	...
Glacé Cherries	1	1	...	...	...
Rum Essence	1	1	...	...	...
Liquorice Roots	1	1	...	...	...
Totals	290	275	15	11	2

APPENDIX 10.

THE PUBLIC HEALTH (PRESERVATIVES IN FOOD)
REGULATIONS, 1925-1927.

Year 1936.

Nature of Article.	Number of samples examined for preservative.	Number of samples found correct.
Milk	125	125
Condensed Milk	15	15
Separated and Skimmed Milk	4	4
Cream and Tinned Cream..	4	4
Butter	28	28
Margarine	16	16
Bottled Plums	1	1
Dried Fruit... ..	1	1
Ground Ginger	1	1
Sausages	5	3
Confectionery	5	5
Jam	1	1
Cream Buns	1	1
Syrup	1	1
Table Cream	1	1
Coffee and Chicory Extract..	3	3
Cornflour	1	1
Pepper	3	3
Blackcurrant Wine	1	1
Fruit Sauce	1	1
Glace Cherries	1	1
Totals	219	217

APPENDIX 11.

RETURN relating to all persons who were treated at the TREATMENT CENTRE at
BOOTLE GENERAL HOSPITAL during the year ended the 31st December 1936.

	Syphilis.		Soft Chancre.		Gonor- rhoea		Conditions other than venereal.		Totals.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Totals.
1. Number of cases on 1st January under treatment or observation.	96	32	4	—	211	38	17	—	328	70	398
2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection	13	6	—	—	32	5	—	—	45	11	56
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from:											
Syphilis, primary	14	4	—	—	—	—	—	—	14	4	18
,, secondary	12	—	—	—	—	—	—	—	12	—	12
,, latent in 1st year of infection	1	—	—	—	—	—	—	—	1	—	1
,, all later stages	9	8	—	—	—	—	—	—	9	8	17
,, congenital	1	1	—	—	—	—	—	—	1	1	2
Soft Chancre	—	—	6	—	—	—	—	—	6	—	6
Gonorrhoea, 1st year of infection	—	—	—	—	106	21	—	—	106	21	127
Gonorrhoea, later	—	—	—	—	15	6	—	—	15	6	21
Conditions other than venereal	—	—	—	—	—	—	44	26	44	26	70
4. Number of cases dealt with for the first time during the year under report known to have received treatment for the same infection, or to have been under observation, at other Centres ...	8	—	—	—	14	—	—	—	22	—	22
TOTALS OF ITEMS 1, 2, 3 & 4.	154	51	10	—	378	70	61	26	603	147	750
5. Number of cases discharged after completion of treatment and final tests of cure or after diagnosis as non-venereal ...	11	6	7	—	9	2	46	21	73	29	102
6. Number of cases which ceased to attend before completion of treatment and were, on first attendance, suffering from:—											
Syphilis, primary	12	3	—	—	—	—	—	—	12	3	15
,, secondary	10	3	—	—	—	—	—	—	10	3	13
,, latent in 1st year of infection	5	—	—	—	—	—	—	—	5	—	5
,, all later stages	10	8	—	—	—	—	—	—	10	8	18
,, congenital	2	1	—	—	—	—	—	—	2	1	3
Soft Chancre	—	—	—	—	—	—	—	—	—	—	—
Gonorrhoea, 1st year of infection	—	—	—	—	76	16	—	—	76	16	92
Gonorrhoea, later	—	—	—	—	27	8	—	—	27	8	35
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure	12	4	—	—	39	1	—	—	51	5	56
8. Number of cases transferred to other centres or to institutions, or to care of private practitioners	19	4	2	—	35	2	—	—	56	6	62
9. Number of cases remaining under treatment or observation on 31st December	73	22	1	—	192	41	15	5	281	68	349
TOTALS OF ITEMS 5, 6, 7, 8 & 9.	154	51	10	—	378	70	61	26	603	147	750

(These totals should agree with those of Items 1, 2, 3 and 4)

APPENDIX 11 (continued).

	Syphilis.		Soft Chancre.		Gonorrhoea.		Conditions other than venereal.		Totals.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Totals
10. Number of cases in the following stages of syphilis included in Item 6 which failed to complete one course of treatment:											
Syphilis, primary	5	2	—	—	—	—	—	—	5	2	7
„ secondary	4	1	—	—	—	—	—	—	4	1	5
„ latent in 1st year of infection	2	—	—	—	—	—	—	—	2	—	2
„ all later stages	6	3	—	—	—	—	—	—	6	3	9
„ congenital	1	1	—	—	—	—	—	—	1	1	2
11. Number of attendances:—											
(a) for individual attention of the medical officers	2443	438	49	—	5465	748	383	107	8340	1293	9633
(b) for intermediate treatment, e.g., irrigation, dressing	—	—	—	—	3491	—	—	—	3491	—	3491
TOTAL ATTENDANCES	2443	438	49	—	8956	748	383	107	11831	1293	13124
12. In-patients:—											
(a) Total number of persons admitted for treatment during the year	2	2	—	—	4	5	—	—	6	7	13
(b) Aggregate number of "in-patient days" of treatment given	90	117	—	—	184	202	—	—	274	319	593
	Under 1 year.		1 and under 5 years.		5 and under 15 years.		15 years and over.		Totals.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
13. Number of cases of congenital syphilis in Item 3 above classified according to age periods	—	—	—	—	—	—	1	1	1	1	
Arsenical.											
	Approved Arsenobenzene Compounds.				Others.		Mercury.		Bismuth.		
14. (a) Names of chief preparations used in the treatment of syphilis	Kharsulphan Neo-Kharsivan				—		Mercollloid		Bismuth Metal and Bisglugol		
(b) Total number of injections given (out-patients and in-patients)	779				—		..		701		

APPENDIX 11 (continued).

	Microscopical		Cultural (or Gonorr- rhoea)	Serum		Cerebro- spinal fluid	Others for diagnosis of Venereal Disease
	for Syphilis	for Gonor- rhoea		for Syphilis	for Gonor- rhoea		
15. Pathological Work:—							
(a) Number of specimens ex- amined at and by the medi- cal officer of the treatment centre	—	183	—	—	—	—	—
(b) Number of specimens from patients attending at the Treatment Centre sent for examination to an approved laboratory	—	227	—	323	—	—	—

Statement showing the services rendered at the Treatment Centre during the year, classified according to the areas in which the patients resided.

	Bootle.		Liverpool.		Lancashire.		Various.		Total.
	M.	F.	M.	F.	M.	F.	M.	F.	
A. Number of cases from each area included under the following headings in Item 3:—									
Syphilis	13	8	5	4	9	1	10	—	50
Soft Chancre	1	—	2	—	1	—	2	—	6
Gonorrhoea	46	17	13	5	26	7	34	—	148
Conditions other than vener- eal	28	20	7	4	7	—	4	—	70
TOTAL ...	88	45	27	13	43	8	50	—	274
B. Total number of attendances of all patients residing in each area	5962	374	2390	215	2969	204	510	—	13124
C. Aggregate number of "In- patient days" of all patients residing in each area	145	82	12	20	—	217	117	—	593

W. L. WEBB, M.B., Ch.B.,
RUTH NICHOLSON,

12th February, 1937.

Medical Officers of the Treatment Centre.

At the University of Liverpool—

Nature of Test.	Number of tests in respect of patients under care of:—		
	Treatment Centres.	Hospitals and other Institutions.	General Practitioners.
Microscopical—			
For detection of gonococci	227	1	10
Serum Tests—			
For Wassermann reaction	323	143	8
Cultures	—	—	1
Totals	550	144	19

APPENDIX 13.

WORK DONE BY THE WELFARE VISITORS.

[illegible]

APPENDIX 14.

ANTE-NATAL CLINICS.

JANUARY 1ST TO DECEMBER 31ST, 1936.[illegible]

APPENDIX 15.

MIDWIVES ACT, 1936.

PROPOSALS FOR EMPLOYMENT BY THE COUNCIL OF MIDWIVES.

1. The Council shall appoint, in the first instance, eight midwives, who shall give whole-time service (increasing or decreasing that number as circumstances require), the posts to be designated for superannuation purposes under the Local Government and other Officers Superannuation Act, 1922.

2. The eight midwives appointed shall, in the first instance, be recruited, so far as is possible (after advertisement) from midwives at present practising in the Borough, whose age does not exceed 55 years at the 1st August, 1937. In subsequent appointments, the age of midwives appointed shall not exceed 35 years at the date of appointment.

3. When the proposals come into operation, the eight midwives appointed be allocated for duty as under, it being understood, however, that a certain amount of elasticity will be necessary according to the extent of the demand on any one or other or the services of such midwives; the same conditions continuing to apply in the event of additional appointments being made:—

Three midwives to be resident on the east of Stanley Road,

Five midwives to be resident on the west of Stanley Road, in houses in positions to be approved by the Council.

No midwife shall book or attend to cases which arise more than one mile from her residence, unless in exceptional circumstances—

(a) where the midwife has attended the same patient on previous occasions, and the patient desires her services in the particular case arising;

(b) where she is required to attend cases outside her district by the Medical Officer of Health.

4. Any midwife appointed by the Council shall on marriage after she is appointed tender her resignation, otherwise it must be fully recognised that the Council will be at liberty to terminate her appointment by requisite notice.

5. All women appointed must undertake to comply with the instructions of the Council in connection with the provision of any Regulations made by the Central Midwives Board under section 7 of the Midwives Act, 1936.

6. Uniform (outdoor and indoor) and necessary equipment will be supplied free of cost by the Corporation. Laundry service will also be supplied free of cost by the Corporation in respect of dresses and overalls.

7. The Corporation will instal a telephone in the house of each Municipal Midwife, to enable her to carry out her duties, and pay for the maintenance and the charges in respect thereof.

8. Travelling expenses incurred by a midwife during the carrying out of her duties will be refunded by the Council to an amount not exceeding £2 per annum.

The Council will provide a bicycle for any midwife desiring such provision for assisting her to carry out her duties.

9. In suitable cases where a midwife is required by the Council to change her residence, involving the payment of increased rent, the Council will consider the granting of rent allowances.

10. Subject to the Medical Officer of Health making the necessary arrangements (a) annual leave of absence of four weeks will be allowed to each midwife; (b) each midwife will be granted a period "off duty" on the basis of one week-end in every four weeks from 11 p.m. Friday to 11 p.m. the following Monday; (c) during the weeks other than that in which the Monday above-mentioned is a period "off duty," the midwife shall be entitled to one day free from duty.

11. Each Municipal Midwife shall be required to work under the direction and supervision of the Medical Officer of Health.

12. These proposals shall apply within the area of the Borough save in emergency cases resident near the boundary.

13. Midwives on appointment will be required to pass a medical examination by the Council's Medical Officer of Health and, if eligible, at the appropriate time, to contribute to the Council's Superannuation Fund.

14. All appointments shall be determinable by one calendar month's notice on either side.

15. The salaries to be paid will be after the rate of:—

(a) £200 per annum, rising by annual increments of £12 10s. 0d. on approved service, to £250 per annum in the case of women holding the qualification of General Nursing Training and the C.M.B. Certificate, and

(b) £180 per annum, rising by annual increments of £10 to £230 per annum for others.

In the event of women being in Class (b) on appointment subsequently obtaining the required qualifications, they shall be automatically transferred to Class (a) so far as salary and grading are concerned.

16. Any midwife appointed by the Council shall on her appointment undertake that in the event of her retirement or resignation from the Council's service, she shall not within a period of five years therefrom practice privately as a midwife in respect of cases arising in the area now or in future included within the Borough.

17. The scale of fees to be charged by the Council for the services of Municipal Midwives or Maternity Nurses shall be in the case of first Confinements £2 2s. 0d., and in the case of second or subsequent Confinements £1 10s. 0d., subject always to the proviso that, in the case of persons unable to pay wholly or in part, appropriate remissions may be made as indicated by the Act. Such fees shall be exclusive of any medical fees should the services of a Doctor be required in any particular case.

RETURN to be made on or before the 13th of February, 1937, by Mr. N. Lockwood, Vaccination Officer of the Bootle Registration District, respecting the Vaccination of Children whose births were registered from 1st January to 31st December 1935, inclusive.

Registration Sub-Districts comprised in the Vaccination Officer's District.	Number of Births returned in the "Births List Sheets" as registered from 1st Jan., to 31st Dec. 1935.	Number of these Births duly entered by 31st January 1937, in Columns I., II., IV. and V. of the "Vaccination Register" (Birth List Sheets), viz. :					Number of these Births which on 31st January, 1937, remained un-entered in the "Vaccination Register" on account (as shown by "Report Book") of				Number of these Births remaining on 31st January, 1937, neither duly entered in the "Vaccination Register" (columns 3, 4, 5, 6 and 7 of this Return) nor temporarily accounted for in the "Report Book" (columns 8, 9 and 10 of this Return.	*Total number of Certificates of Successful Primary Vaccination of Children under 14 received during the Calendar Year 1936.	Number of Statutory Declarations of Conscientious Objection received by the Vaccination Officer irrespective of the dates of birth of the children to which they relate, during the Calendar Year 1936.
		Col. I.	Col. II.		Col. IV.	Col. V.	Postponement by Medical Certificate	Removal to Districts the Vaccination Officers of which have been duly apprised.	Removal to places unknown, or which cannot be reached, and Cases not having been found.				
1	2	3	4	5	6	7	8	9	10	11	12	13	
BOOTLE ...	1491	1183	16	—	206	70	7	29	25	5	1580	222	
Total ...	1491	1183	16	—	206	70	7	29	25	5	1580	222	

4th February 1937.

N. LOCKWOOD, Vaccination Officer.

NOTE.—The total of the figures in columns 3 to 11 should agree with the figure in column 2. Any cases of children successfully vaccinated after the declaration of conscientious objection had been made should be included in column 6 above and not in column 3. The number of such cases should be inserted here:—One.

*The total in this column should be the number of Certificates of successful primary vaccination of children under 14, actually received during the year, including any relating to births registered in previous years. The total thus given should include the Certificates of successful primary vaccination, of which copies have been sent to Vaccination Officers of other Districts. The total number of Certificates for the year 1936 sent to other Vaccination Officers should be stated here:—445.

APPENDIX 17.

LINACRE HOSPITAL.—REVISED DIAGNOSES AND COMPLICATIONS.

SCARLET FEVER ADMISSIONS.	Bootle	Lither-land	Form-by	DIPHTHERIA ADMISSIONS.	Bootle	Lither-land	Form-by
Re-diagnosed as:—				Re-diagnosed as:—			
Scarlet Fever and Diphtheria	1	—	—	Diphtheria and Scabies	1	—	—
Erythema	4	1	—	Albuminuria	—	1	—
Febricula	1	—	—	Bronchitis	2	—	—
Impetigo	1	—	—	Erysipelas and Mumps	1	—	—
No disease found	1	—	—	Laryngitis	4	—	—
Tonsillitis	1	2	—	Quinsy	1	—	—
				Rheumatism	2	—	—
				Scarlet Fever	1	—	—
				Tonsillitis	43	10	1
				Valvular Disease	1	—	—
Totals	9	3	—	Totals	56	11	1

APPENDIX 18.

METEOROLOGICAL DATA FOR 1936

Supplied by the Liverpool Observatory and Tidal Institute.

Month.	Mean Barometer.	Mean Temperature.	Rainfall.	Mean Cloud.
January ...	29·456 ins.	39·2°	3·917 ins.	8·2
February ...	29·685 ins.	36·9°	2·122 ins.	6·7
March	29·809 ins.	44·6°	1·311 ins.	8·1
April	29·996 ins.	43·7°	0·890 ins.	6·3
May	30·049 ins.	51·7°	1·008 ins.	6·3
June	29·985 ins.	57·2°	4·264 ins.	7·2
July	29·757 ins.	59·2°	2·949 ins.	7·3
August ...	30·081 ins.	59·8°	1·496 ins.	6·7
September ...	30·008 ins.	57·6°	2·929 ins.	7·5
October ...	30·067 ins.	50·6°	1·488 ins.	7·2
November ...	29·701 ins.	43·6°	2·756 ins.	7·6
December ...	29·985 ins.	43·2°	3·484 ins.	7·3
Year	29·882 ins.	48·9°	28·614 ins.	7·0

APPENDIX 19.

LOCAL POWERS RELATING TO PUBLIC HEALTH.

						Dates provisions became operative.	
(1) ACTS OF PARLIAMENT ADOPTED BY THE COUNCIL.							
Infectious Disease (Notification) Act, 1889	...	...	...	...	...	8	April, 1891
Infectious Disease (Prevention) Act, 1890, sections 4, 5, 6, 14, 16, 17, 18, 20, 21	...	...	...	...	...	11	Oct., 1893
Public Health Acts Amendment Act 1890, Part III.	...	...	...	...	...	11	Oct., 1893
ditto. Part V.	...	...	...	...	...	2	June, 1920
Infectious Disease (Prevention) Act, 1890, section 15	...	...	...	...	...	5	Sept., 1900
Public Health Acts Amendment Act, 1907, section 95	...	...	...	...	...	11	Dec., 1908
Public Health Acts Amendment Act, 1907, sections 22, 23, 24, 33, 35, 44, 50, 51, 52, 53, 54, 55, 57, 61, 62, 63, 64, 65, 69, 70, 71, 72, 73, 74, 75	...	...	...	...	...	20	Feb., 1915
Public Health Act, 1925, sections 13, 14, 15, 16, 17, 18, 19, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 35, 36, 37, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54 and 55	...	...	...	...	...	1	Dec., 1926
(2) BOOTLE CORPORATION ACTS AND ORDERS—							
Bootle Corporation Act, 1890	...	...	...	...	...	1	Sept., 1890
Bootle Order, 1897; confirmed by the Local Government Board's Provisional Orders Confirmation (No. 16) Act, 1897, relative to Sanitary Improvements	...	...	...	...	...	24	Mar., 1897
Bootle Corporation Act, 1899	...	...	...	...	...	8	Aug., 1899
Bootle Corporation Act, 1905	...	...	...	...	...	9	Nov., 1905
Bootle Order, 1914; confirmed by the Local Government Board's Provisional Orders Confirmation (No. 6) Act, 1914, relating to the substitution of moveable ashpits for fixed ashpits	...	...	...	...	...	13	Mar., 1914
Bootle Corporation Act, 1920	...	...	...	...	...	31	Mar., 1921
Bootle Order, 1927; confirmed by the Ministry of Health's Provisional Orders Confirmation (No 4) Act, 1927, relating to the substitution of ashbins for ashpits	...	...	...	...	...	24	Mar., 1927
Bootle Corporation Act, 1930	...	...	...	...	...	1	Aug., 1930
(3) BYE-LAWS AND REGULATIONS IN FORCE IN THE BOROUGH -							
Slaughter Houses, 1887	...	...	...	...	...	26	May, 1887
Nuisances, 1887	...	...	...	...	...	7	Nov., 1887
Common Lodging Houses, 1894	...	...	...	...	...	25	June, 1894
Carriage of Offensive Matter through Streets, 1898	...	...	...	...	...	26	July, 1898
Hospitals provided by the Corporation, 1904	...	...	...	...	...	10	June, 1904
New Streets and Buildings, 1927	...	...	...	...	...	31	Oct., 1927
Removal of Refuse from Premises and the Cleaning of Privies, etc. (Repeal of former Bye-laws)	...	...	...	...	...	16	Dec., 1929
Smoke Abatement Bye-laws, 1930	...	...	...	...	...	15	Dec., 1930
Houses let in Lodgings, or occupied by members of more than one family	...	...	...	...	...	19	May, 1931
Nursing Homes	...	...	...	...	...	10	Dec., 1931
New Buildings	...	...	...	...	...	21	April, 1932
Howe Street Improvement Area	...	...	...	...	...	21	Sept., 1932
Miller's Bridge Improvement Area	...	...	...	...	...	1	Oct., 1934
Howe Street Improvement Area	...	...	...	...	...	1	Oct., 1934

